



an adaptive reuse plan
MT ELLIOTT INTERPRETIVE CENTER

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MT. ELLIOTT INTERPRETIVE CENTER

An Adaptive Reuse Plan

CITY OF DETROIT

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This report was funded in part through financial assistance provided by the Office of:

COASTAL ZONE MANAGEMENT

National Oceanic and Atmospheric Administration

United States Department of Commerce through

funds provided under the Coastal Zone Management Act of 1972 (PL 92-583)

and administered by the:

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Division of Land Resources Program

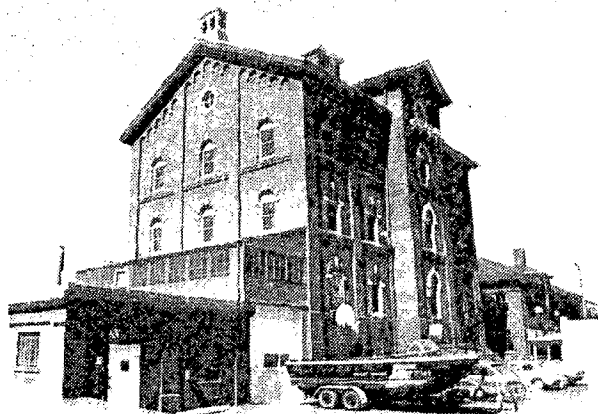
Coastal Zone Management Program

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September, 1981



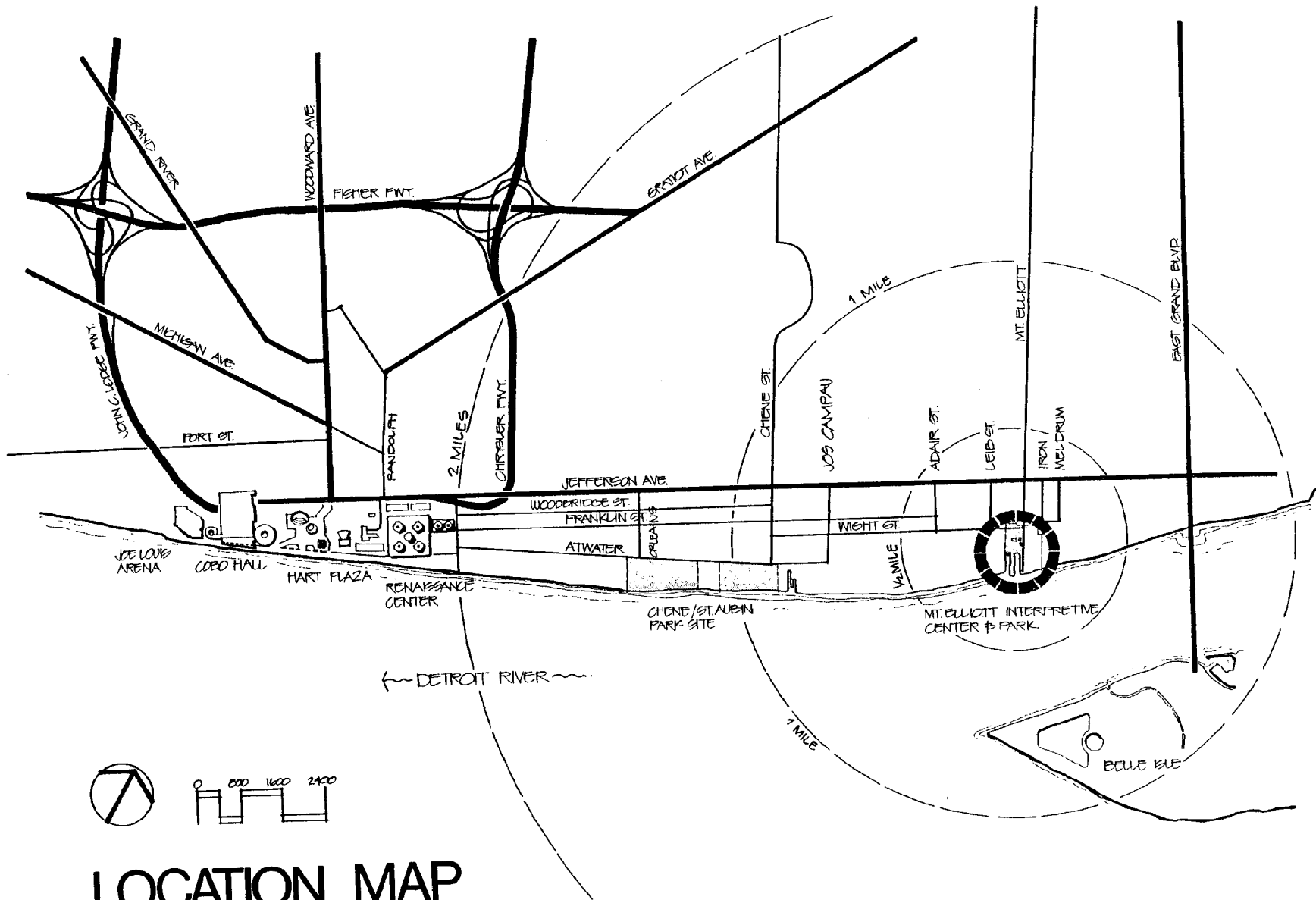
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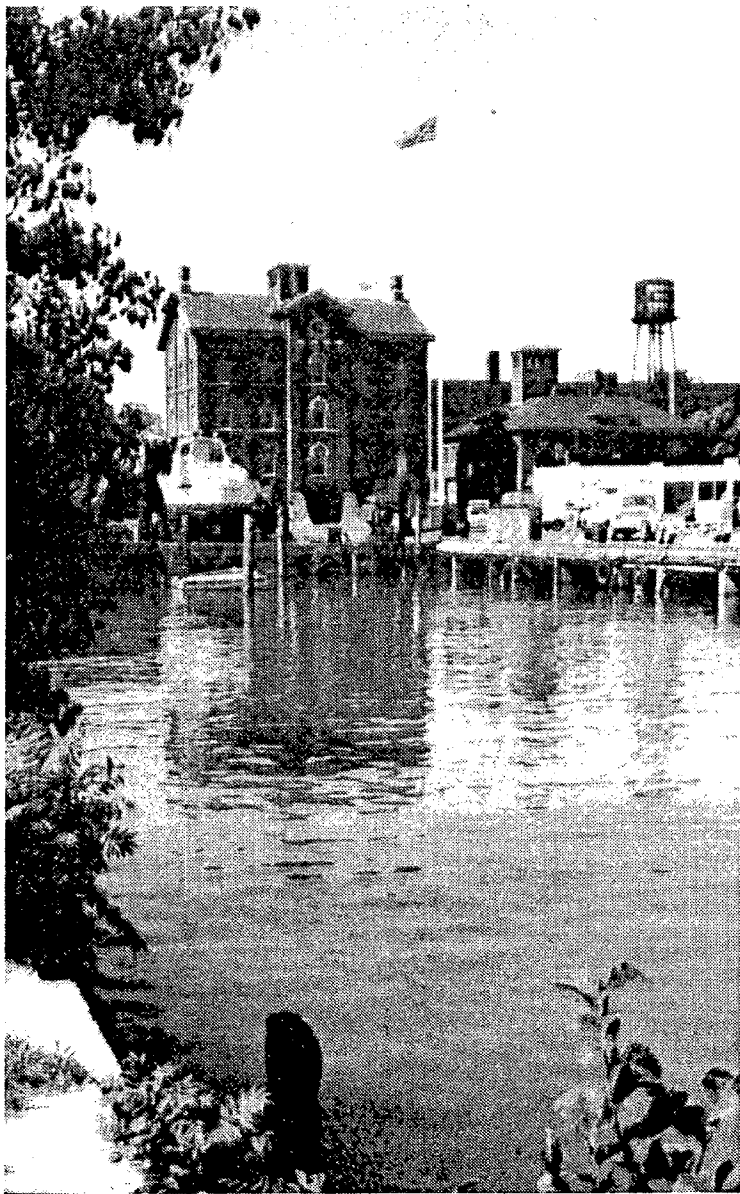
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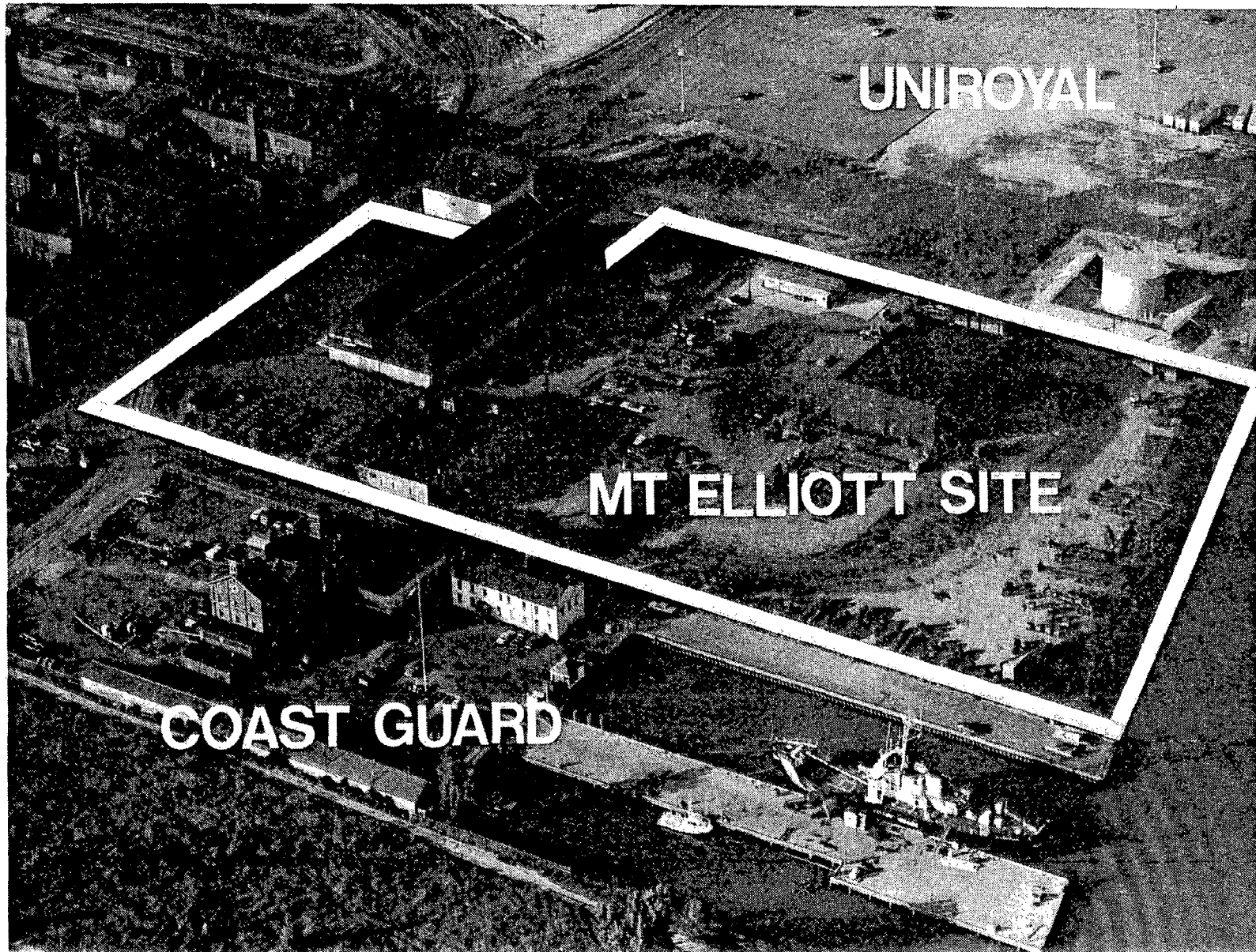




INTRODUCTION

Detroit has been going through a rebirth with national attention focused on its efforts towards redevelopment. Many major developments have occurred or are now planned for the Central Business District. Conventions, tourism, new housing, the ethnic festivals and the popularity of Hart Plaza have brought about renewed interest in the city's riverfront. In 1979 the City of Detroit, Recreation Department, with Coastal Zone Management funds administered by the Michigan Department of Natural Resources, published the Linked Riverfront Parks Plan (LRPP) which proposed a major park system between the Renaissance Center and the Belle Isle Bridge, linking park sites with routes that interpret the cultural and industrial history of the area.

It is one of the recommendations of the LRPP that one or more buildings at the United States Coast Guard Group/Base Detroit headquarters, located at the foot of Mt. Elliott Street, be adapted for reuse as an Interpretive Center relating regional history to the public. The oldest of these buildings, constructed over 110 years ago, has since become cramped and inefficient for its current use as a storage and maintenance facility. Plans by the U. S. Coast Guard to abandon three of these buildings and construct a new facility on an adjacent site helped stimulate interest in preserving them by developing the Interpretive Center.



The Coast Guard Group Detroit Bast with the Mt. Elliott Park Site

The Center is located adjacent to a proposed park at the foot of Mt. Elliott Street. The park relates closely to the Center and expands the interpretive theme outdoors telling intriguing stories and giving information about the history of the area, the Detroit River and Michigan. Reutilizing these historic structures and developing the Mt. Elliott Park will add a new dimension to Detroit's unique history and stimulate excitement and interest in this emerging activity area along the riverfront.

To achieve these ends, this study has three goals:

1. To investigate the future interface between the proposed Interpretive Center and Mt. Elliott Park and all adjacent land uses.
2. To assess, program and estimate construction and operations expenses for the Interpretive Center.
3. To present a strategy for implementation of the Interpretive Center.

RECOMMENDATIONS & CONCLUSIONS

The following conclusions are drawn and recommendations are made in light that this document contains a variety of subjects, and explore a range of alternatives.

Land Use

In general land uses both east and west of the Mt. Elliott Interpretive Center and Park are seen as developing into new mixed residential and commercial use.

Additional land uses will include warehouse industrial conversions to a commercial office and loft apartment use, a 300 car parking structure, and the ongoing land use by the Immigration and Naturalization Department and the Coast Guard.

To acquire three historic Coast Guard buildings for conversion to the Interpretive Center, a land trade is proposed in which 1.8 acres (with the buildings) are acquired by the City in exchange for 2.75 acres of City owned land directly west of the existing slips. Here the Coast Guard will develop new facilities to better serve the community.

The proposed Mt. Elliott Park is shown expanded east into the City of Detroit owned, Uniroyal property for a total of 15.7 acres. 1550 feet of river frontage is developed as a fitness, history and marine interpretive park that works closely with the proposed Interpretive Center.

Interpretive Center

The Coast Guard buildings which are proposed to be acquired include the 5-story Lighthouse Supply Depot with the attached 1 story Aids to Navigation Building and the 3 story Engineering Services Building with the attached 1 story Exchange Building.

The Lighthouse Supply Depot Building has an area of 9,960 square feet and is proposed used as an exhibition/museum space displaying permanent and rotating exhibits on a variety of subjects, including Great Lakes Marine information, Detroit and regional history, health, fitness and Natural Resources.

The ESA Building has an area of 9,678 square feet and is programmed as a food concession, bait and tackle concession, rentable and park office space, a conference room, public restrooms and storage.

The Aids to Navigation Building has an area of 1,275 square feet and is programmed to be developed privately as a restaurant.

The Exchange Building has an area of 1,099 square feet and is programmed to be developed privately as a bicycle rental concession.

Implementation

The total projected cost for the recommended development is estimated at \$7,220,000 and is broken down into three basic phases. Certain actions can be undertaken immediately.

Immediate actions would create an entry at Jefferson and a green park with a stabilized shoreline at the undeveloped Detroit River for \$842,000.

Phase One develops the Interpretive Center exhibition facilities. It also begins the development of Mt. Elliott Park, the Mt. Elliott Street improvements and mini park at Jefferson. The estimated cost is \$3,856,000.

Phase Two develops the concession facilities in the Interpretive Center, the Entry Plaza to the park area and completes Mt. Elliott Park for an estimated cost of \$1,475,000.

Phase Three finishes all uncompleted work and develops the parking structure for an estimated \$1,247,000.

Recommendations for funding sources realizes that many programs previously relied upon, have been cut or eliminated. Although every attempt should be made to secure funds from remaining sources, a greater reliance will be placed on local sources. The development of this project will also enhance adjacent private developments and a portion of the developmental costs of the public improvements should be pro-rated to adjacent private developments.



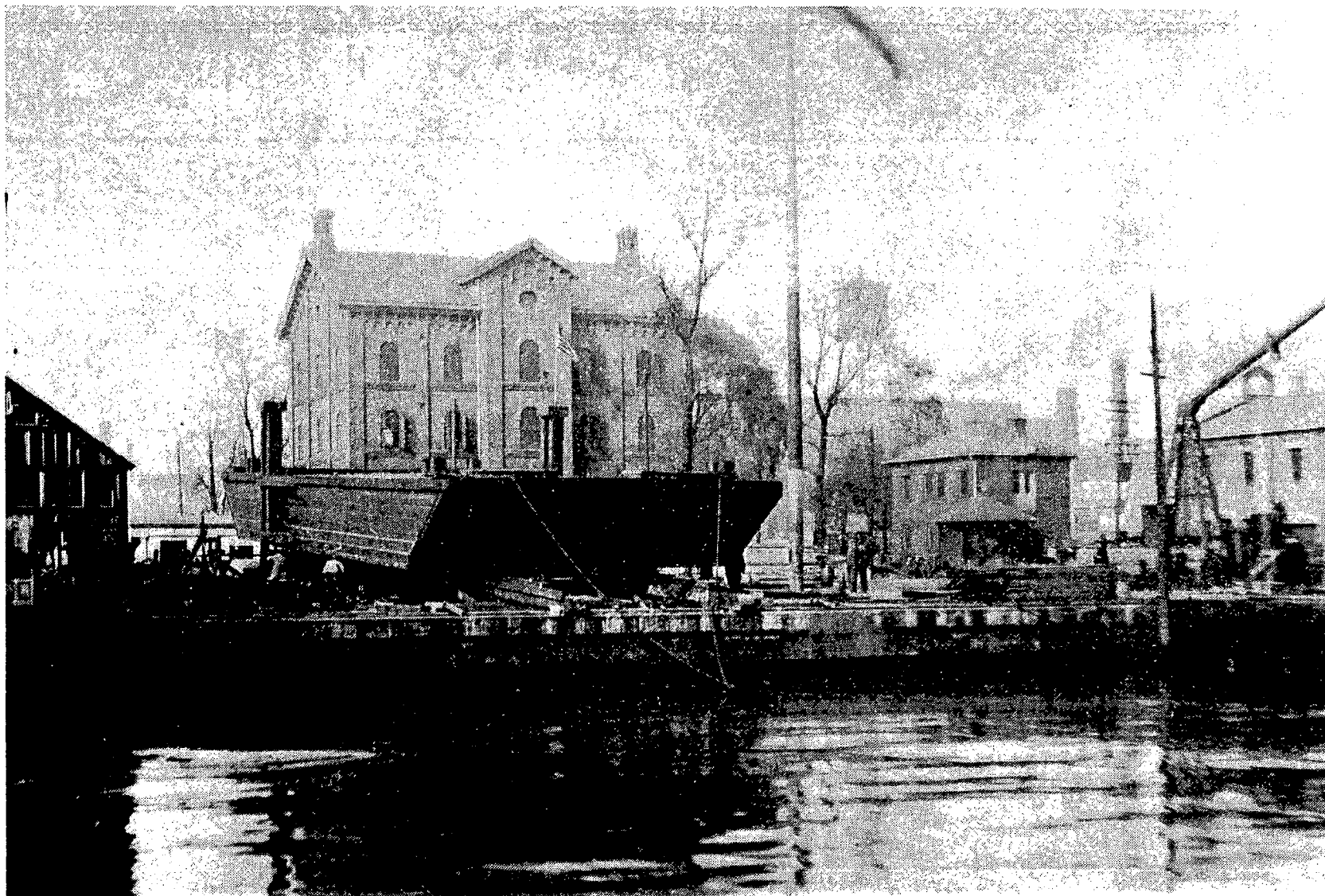
South elevation of Lighthouse Supply Depot
showing original iron shutters.

HISTORY

Much of Detroit's rich and varied history is strongly rooted along the Detroit River. It was the reason for the location of the early Indian and French settlements and was the vehicle by which the early city was sustained. Shipworks, sawmills, and ironworks flourished along the river and Detroit became an intense center of trade and manufacturing.

To help maintain the health, safety and welfare of its citizens and protect them from accidents, natural disasters and foreign enemies, the United States Congress established the U. S. Lighthouse Board in 1852 and they, in turn, erected the Lighthouse Depot near the foot of Mt. Elliott Street at Wight Street in the early 1870's. The purpose of this handsome 4-story Romanesque Revival building was to store oil, soap, coal, and all other supplies essential to maintaining lighthouses and other aids to navigation for the Detroit area.

Since the completion of construction in 1874, the Detroit Lighthouse Depot has had the singular function of serving the Great Lakes Region as a central storehouse for lighthouse supplies and buoys. Although its history lacks drama and excitement it has, nonetheless, been significant in playing a necessary role in maintaining the safety and navigability of the Detroit area. The Light House Depot building has been nominated to the National Register of Historic Places by the



Light House Board Central Buoy & Supply Base, circa 1917. Note absence of elevator tower and the ESA Building, at right, before its expansion.

Department of Transportation, United States Coast Guard Ninth District. The following history is taken in large part from the nomination form.

After its creation by Congress in 1852, the nine-member U.S. Lighthouse Board divided the country into twelve lighthouse districts. They appointed an inspector and an engineer to each district. The inspector, who was an officer of the Army, prepared plans and specifications for new lighthouses, supervised their construction and repair, and had charge of the installation and repair of all illuminating apparatus.

The Lighthouse Board set up a central supply depot at Staten Island, New York. Later, the Board established a supply depot in each lighthouse district for the storage of fuel oil, spare illuminating apparatus, buoys, and miscellaneous supplies. By 1880, the number of districts had been enlarged from twelve to fifteen. Detroit served as headquarters for the Eleventh Lighthouse District which included the American shores of the Detroit River, Lakes St. Clair, Huron, Superior, the Straits of Mackinac, and the St. Marys River. The Eleventh District was the largest in the country in extent of shoreline and second largest in number of lighthouses.²

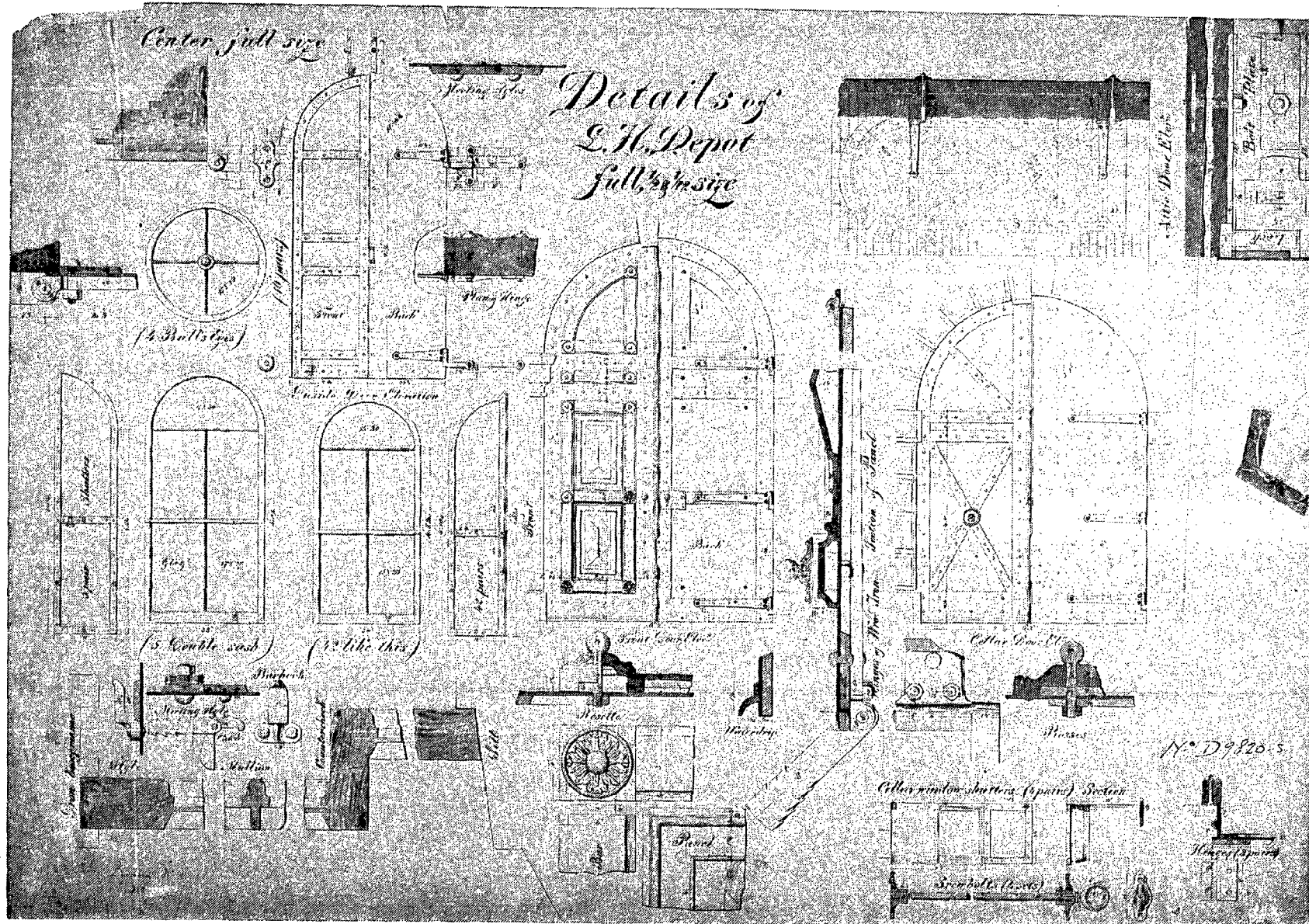
A "buoy and supply depot" was first established at Detroit about 1869 on the grounds of the U. S. Marine Hospital. That year the hospital transferred a portion of its grounds between Wight Street and the Detroit River to the U. S. Treasury Department, which had responsibility for all lighthouse matters. Between 1871 and 1874, a new government

storehouse called the "Light House Depot" was erected at the foot of Mt. Elliott Street, just south of Wight Street. The voluminous records of the U. S. Lighthouse Board, located at the National Archives, document its construction.³

In 1870 the Lighthouse Board reported that, "All the oil and other supplies for the lighthouse on the lakes are received at, and distributed from this depot. The small temporary storehouse of wood is not only inadequate in size and unadapted to the service, but is unsafe for the storage of such valuable combustible property ..." The project of building a more permanent masonry storehouse was conceived and begun during Orlando M. Poe's tenure as engineer for the Eleventh Lighthouse District (1870-1873). In a letter to the scientist Joseph Henry, who then was serving as Chairman of the Lighthouse Board, Poe wrote:

In spring of 1870 I entered upon duty as Engineer of the 11th L.H. District and soon afterwards submitted to (the) Board a project for the improvement of the grounds and basin, to fit the Depot to the increased wants of the L.H. (Board).. The improvements actually carried out were the building of bulkheads across the water front and filling in behind -- the dredging of the basin to a uniform depth ... (and) erecting a fireproof storehouse of 40'x 60' in plan having an oil cellar in the basement ...

The depot was to be used by the district inspector and engineer. According to Poe, "in constructing the storehouse, it was symmetrically divided on its shortest dimension the



This sheet of construction drawings detailing windows and doors was originally in color.

object being to make a series of rooms on either side of a good wide hall, the rooms on one side of the hall to be occupied by the engineers, and⁴ those on the other side by the inspector."

During 1871, the basement and first two floors of the building were completed. A temporary roof was erected to protect the building until work resumed the following spring. During 1872, the walls of the third story were "finished to receive the brackets" and again covered with a temporary roof while construction was suspended for the winter. Work resumed in April 1873. Construction of the fireproof iron and slate room was completed and wooden floors were laid in some of the rooms, "great care being exercised to see that the space between them and the supporting arches was⁵ completely filled with sand well rammed in."

Work continued during 1874, "until the money was all expended". The ground around the building was graded; sash for all windows were hung; the elevator was installed; the front and basement ("all of iron") were hung; and the basement flagging and the rest of the floors were laid. In 1874, the Lighthouse Board requested an additional \$10,000 from Congress to complete work on the depot and build a new landing dock. The request was granted and, between 1875 and 1876, a new dock was built and iron shutters were installed on all windows in the depot. Lighthouse records do not indicate who erected the building, but such projects usually bid to private contractors.

By 1890, the storage function of the depot had been enlarged to include steam fog sig-

nal fittings, and the facility served both the Eleventh and Ninth Lighthouse Districts (the latter comprising Lake Erie and Lake Ontario). The building today is part of the U. S. Coast Guard Base Detroit. The Coast Guard has had responsibility for the construction, maintenance, and operation of all aids to navigation since 1939. The depot is still largely used for storage of navigation equipment and supplies, although part of the first floor has been remodeled for office use and a portion of the basement serves as a recreation room. The basement no longer is used to store fuel oil, since virtually all⁶ lighthouses now are powered by electricity.

These functions were taken over by the Ninth District of the U. S. Coast Guard in 1939. With a few alterations, the building is still used today as it was then. Much of the space is inadequate, cramped and does not function well for the expanding maintenance duties required of this base. Therefore, the U. S. Coast Guard plans to abandon three structures on the base and to construct a consolidated new industrial and administrative facility on adjacent property designed to better serve the required maintenance of vessels and aids to navigation.

Footnotes:

1. Francis Ross Holland, Jr., America's Lighthouses: Their Illustrated History Since 1716 (Brattleboro, Vt.: The Stephen Green Press 1972), pp. 35-36.

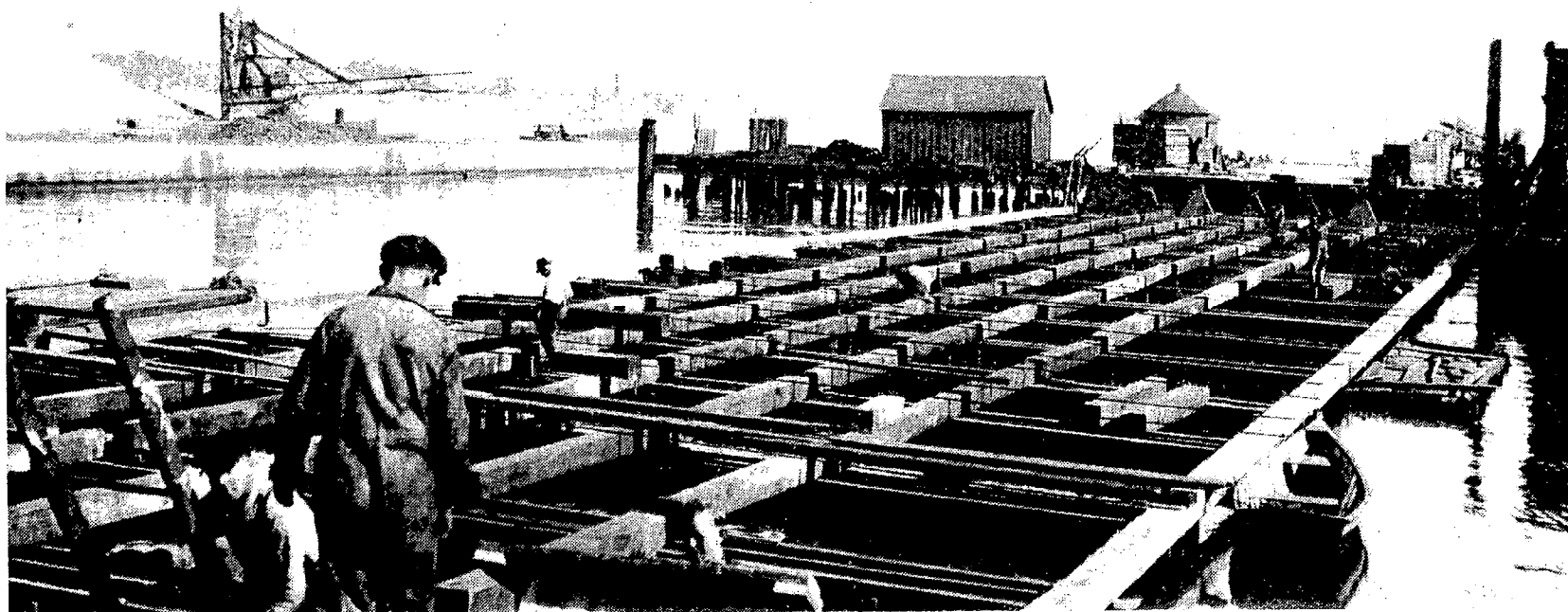
2. Ibid, and Arnold Burges Johnson, The Modern Lighthouse Service (Washington, D.C.: Government Printing Office 1889), pp. 106-107, 119-120.

3. "Detroit Buoy & Supply Depot" clippings file, Records of the United States Coast Guard, Record Group 26, Judicial and Fiscal Branch, National Archives, Washington, D.C.

4. O. M. Poe to Prof. Joseph Henry, 14 January 187-, Records of the United States Coast Guard, National Archives.

5. "Detroit Buoy & Supply Depot" clippings file.

6. Carol Poh Miller, National Register of Historic Places, Inventory - Nominating Form for the Department of Transportation, United States Coast Guard, Ninth District.



Pier expansion and improvements, circa 1922.

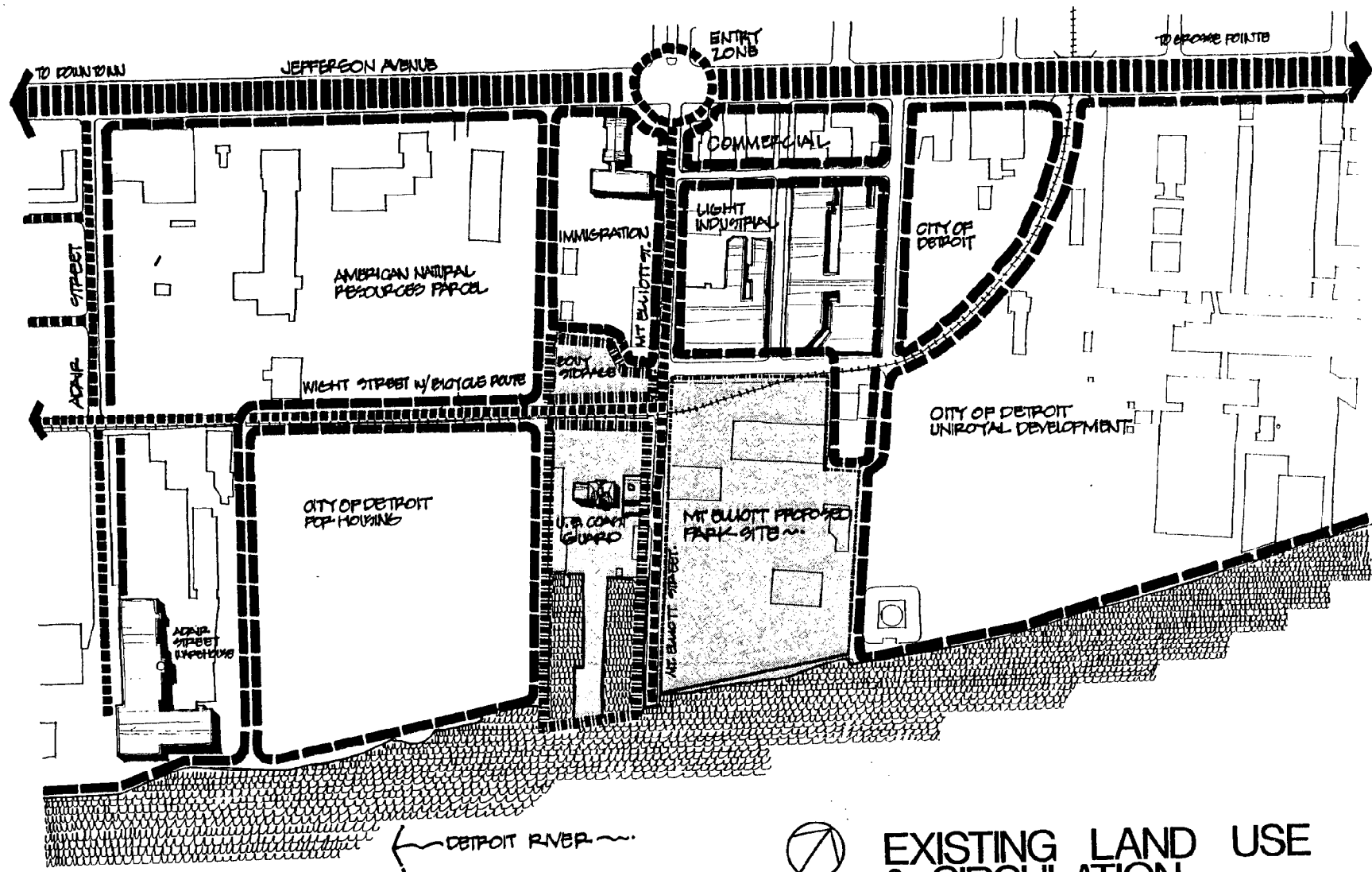
LAND USE DEVELOPMENT

EXISTING LAND USE & CIRCULATION

Land use in the area adjacent to the Coast Guard Base has historically been industrial in nature with commercial uses along Jefferson. The site for the proposed Interpretive Center is the U. S. Coast Guard Group/Base Detroit located at the foot of Mt. Elliott Street, 1.8 miles east of the Renaissance Center and .45 miles west of the Belle Isle Bridge. The Coast Guard site is bisected by Wight Street. The parcel north of Wight is 0.76 acres, vacant of any structures and used for buoy storage. The parcel south of Wight consists of 2.04 acres of land area with an additional 1.9 acres of slips and pier.



To the east of the Interpretive Center site is a 7.34 acre industrial site. This site had been leased by the Seymore Weissman Company to the Re-Steel Center, White Color Card Company, and the J & J Cartage Company. In 1980 the City of Detroit took title to the property for the Mt. Elliott Park and is presently completing negotiations for the purchase of fixtures and relocation of the companies. None of the industries on the site utilize the river frontage and an assessment prepared for the City of Detroit, noted that "most of the existing development has little or no connection with the water and most could be moved to other areas without serious loss of operational capability."



This parcel was purchased with funding provided by the Department of the Interior, Land and Water Conservation Fund. There are significant restrictions covering the uses of land acquired in this manner. These restrictions require that the land remain recreational in perpetuity and may not have any structures erected on it except those used for the service and maintenance of the park, concessions, comfort stations, storage, or open-sided shelters.

East of the proposed Mt. Elliott Park site is the Uniroyal Plant, a large industrial complex abandoned by Uniroyal and bought by the City of Detroit with Community Development Block Grant funds. Much of Uniroyal's riverfront property, developed for parking, is readily adaptable for recreational use and open space.

Northeast of the Coast Guard Base is an area of mixed industrial buildings which are of good scale and character. The most significant of these brick structures is the multi-story Warnock Spring building located on the corner of Wight and Mt. Elliott Streets. This building appears to have potential for adaptive re-use. Some dilapidated commercial buildings exist along Jefferson that have interesting facades and offer the potential for rejuvenation. An antiquated vacant gas station at Mt. Elliott and Jefferson may be removed to improve access, visibility and entrance image down Mt. Elliott to the Interpretive Center.

To the north of the Coast Guard Station is the Federal Building housing the Bureau of Immigration and Naturalization. The original building fronting Jefferson Avenue is a well

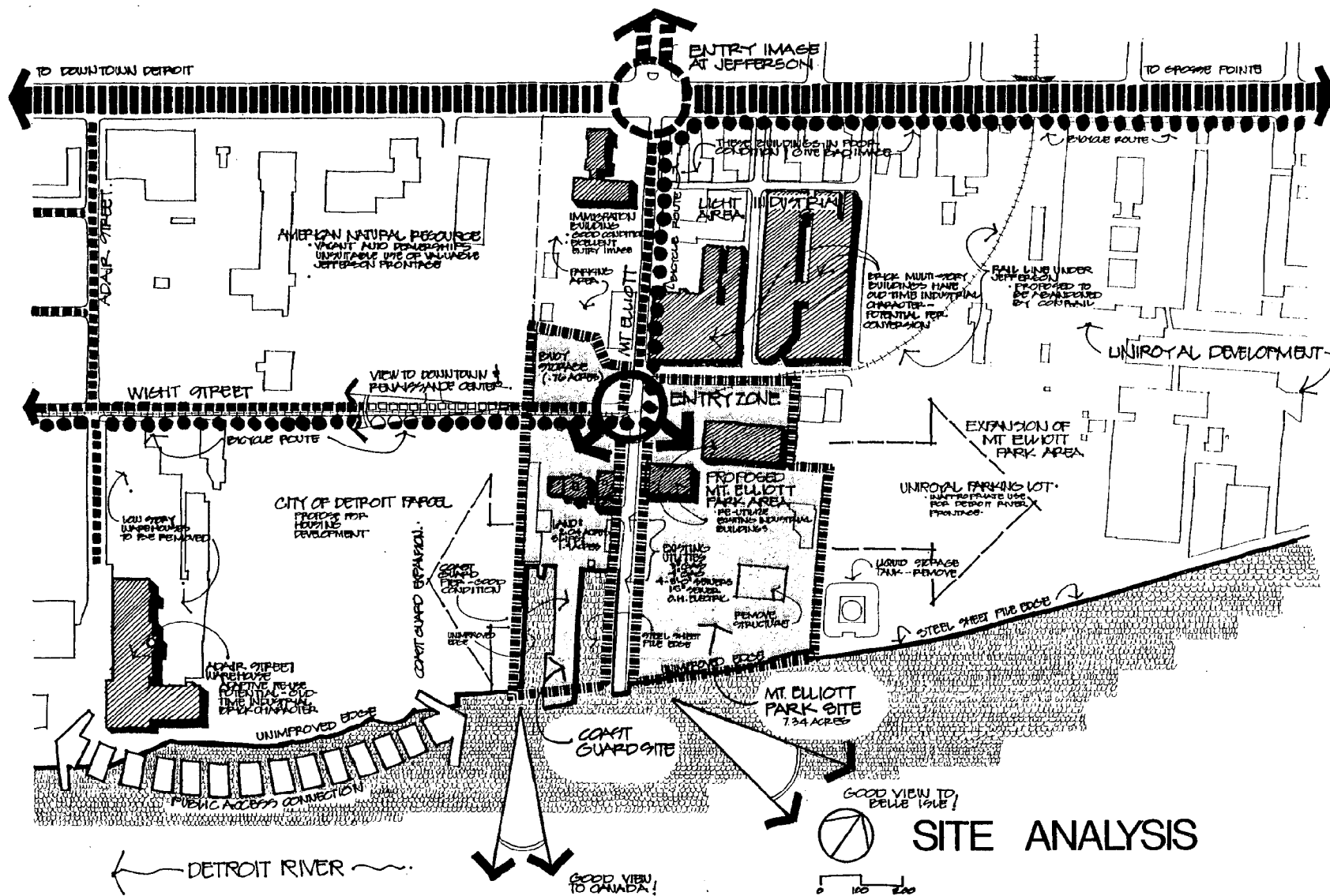
proportioned colonial style structure. A contemporary glass addition was added to the rear in the 1950's. The site is well maintained and forms an attractive entry along Mt. Elliott Street. South of the Immigration Building is a large parking lot that is not fully utilized and is somewhat unattractive.

Vacant land and auto dealerships exist northwest of the Coast Guard Station. This property, along with the City-owned parcel south of Wight Street, is under consideration for development by the American Natural Resources Co. (A.N.R.). The City-owned parcel is free of any structures and has 750 feet of river frontage.

Circulation routes through and around the site include rail, auto, truck, bicycle, and pedestrian paths. Jefferson Avenue is the nearest major vehicular artery. Mt. Elliott, north of Jefferson, has been made into an attractive boulevard. South of Jefferson, however, roads are narrow, unattractive and in poor repair. Traffic on Mt. Elliott and Wight Streets is light.

Rail traffic has run on the streets interfering with vehicular movement. However in June 1981, Conrail abandoned its tracks in the area. This eliminates traffic conflicts, funding is needed to remove the rail spurs and repave the streets.

Pedestrian traffic is minimal due to the non-existence or poor repair of sidewalks and the lack of, or distance between, attractions. A signed-off bicycle route has been constructed by the City of Detroit Recreation Department as of September 1981 along Wight



to Mt. Elliott to Jefferson, and east along Jefferson to Belle Isle. The entire route links the Island to the proposed Mt. Elliott Park and Interpretive Center area, to the rest of the east riverfront area and on to the Central Business District

SITE ANALYSIS

Topography in the Interpretive Center area lacks any significant grade changes, but drops steadily twenty-one feet from Jefferson Avenue toward the river. The railroad tracks passing under Jefferson Avenue between Meldrum and the Uniroyal plant begin a deep trough that continues northward. The proposed Mt. Elliott Park site slopes two feet from Wight Street to the river's edge. The water line is approximately five to seven feet below the land edge.

There is no significant vegetation in the area except a few mature trees by the Immigration Building at Jefferson. The City of Detroit parcel west of the Coast Guard Base is covered with grasses, woody scrub growth, and undesirable trees. The Mt. Elliott site is devoid of vegetation outside of minor growth at the river's edge.

Shoreline characteristics in the area vary from reinforced steel sheet pile to rubble. The entire edge at the proposed Mt. Elliott Park is unstabilized, broken concrete on a steep embankment. Construction will be required to make the edge useable and safe. East along the Uniroyal site, the edge is made of steel sheet pile which is in good condition. The Coast Guard slips are steel sheet pile except for the western edge which is formed by the remains of a concrete wall

and rubble. The 350 foot Coast Guard pier is constructed of reinforced concrete decking on wood piles, is in good repair and is serviced with 200 amp electrical service. The shoreline of the City of Detroit parcel, west of the Coast Guard, is composed of a variety of material, including dilapidated reinforced concrete and steel sheet pile.

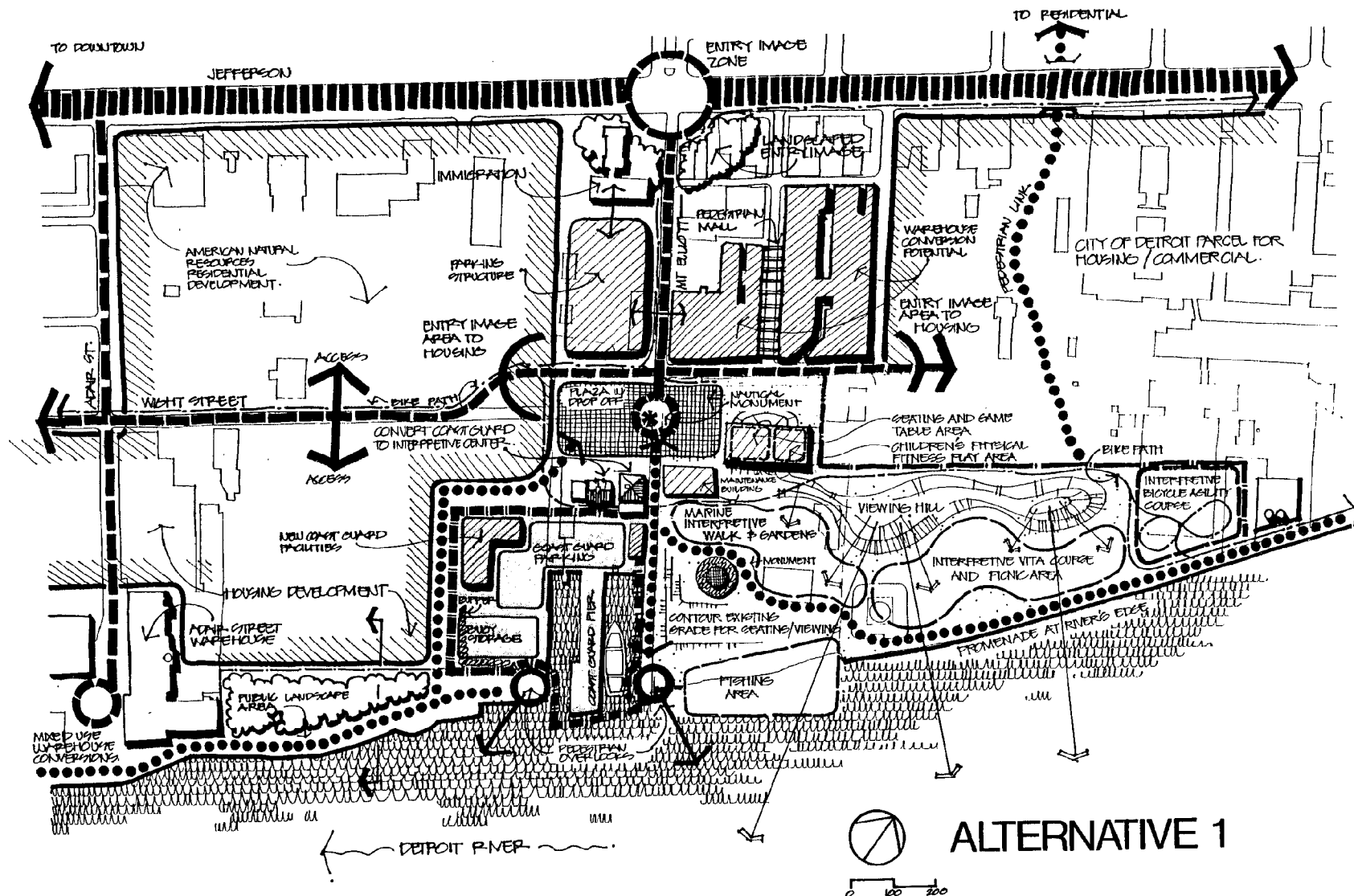
The major utilities in the area include four five-foot diameter sewers below Mt. Elliott Street which act as a storm overflow from the Jefferson interceptor. Also, along Mt. Elliott Street are a 3" and 4" gas line, a 15" sewer and overhead electrical service. Along Wight Street are a 2'8" x 4' sewer and a 12" gas line.

PROPOSED LAND USE & CIRCULATION

After assessing surrounding land uses, proposed developments, impacts on the site, the Coast Guard buildings, and reassessing the proposed Mt. Elliott design, three land use and circulation alternatives were developed.

Alternative One

Based on the potential for intense development of this area, Alternative One takes an active approach to programming the site of the Interpretive Center and Park. This rationale is based on proposals for residential development on the A.N.R. site and existing structures suitable for new development or rehabilitation into mixed use on adjacent properties (Uniroyal and Warnock). The existing brick buildings north of Wight and east of Mt. Elliott currently have viable industrial uses. They are old, in need of repair and existing functions could be more



efficiently housed in new structures. There is a long-term potential for adaptive re-use in this area, including loft apartments, commercial, office or restaurants and cafes.

Wight Street east of Mt. Elliott is proposed as the entry image to proposed mixed use development at Uniroyal. Wight Street west of Mt. Elliott is relocated north approximately 100 feet to align with its eastern extension and act as the entry image to the A.N.R. housing site. If warehouses adjoining Iron Street between Wight and Jefferson are converted to public use, the street can be enclosed into a pedestrian mall.

An extension of the trolley from the Central Business District along existing rail lines can supply an alternate method of transportation. Public pedestrian access to the Detroit River is maintained wherever possible via a promenade that can buffer private development if desired. Sample alternatives to private/public interface are explored in the Issues Section of this report.

Given the increased intensity of development in this Alternative, a three level, three hundred car parking structure is proposed on the northwest corner of Wight and Mt. Elliott Streets. While serving the Park and Interpretive Center, it could be linked via skyways to the Immigration Building and converted warehouses. This location places the parking structure on Federally-owned land. Development options are:

1. Acquisition and development by the City. (This seems unlikely since the Federal Government would lose control

of the land and the City would incur an unnecessary purchase expense.)

2. Land lease and development by the City.
3. Cooperative development by the Federal and City Governments.

If none of these options work, the parking structure may be located on the southeast corner of Jefferson and Mt. Elliott behind the landscaped entry image area. This site would be more visible, but further from the Park and Interpretive Center.

A central plaza is the focus of pedestrian flow from the parking deck, the Interpretive Center, the Park and the converted warehouses. Mt. Elliott terminates in a circular drop-off at this plaza. A mini-amphitheater, lighting, seating, bosque of trees, and an entry sign are incorporated into this plaza. A nautical monument is proposed in the center of a drop-off circle acting as a focal point for travellers from along Wight or Mt. Elliott. It is constructed of a large buoy donated by the U. S. Coast Guard and designed to demonstrate the functions of a buoy as well as be a dramatic visual object. A complete description of the interpretive buoy is found under a separate listing in this report.

In order to acquire the Coast Guard's 2.5 acres of buildings and land for the Interpretive Center and Plaza (including Light House Depot, Machine Shop, the Exchange Building, and the buoy storage yard north of Wight Street), a land trade is proposed

with a City-owned parcel of 3.2 acres west of the Coast Guard. The City-owned parcel extends approximately 250 feet west of the existing Coast Guard property. A 50 foot section inland from the Harbor Line is proposed to remain City-owned for the pedestrian promenade and Coast Guard viewing. Other land trade alternatives are presented in this report under the title "Land Use Issues".

Mt. Elliott Park is health and activity oriented in order to coordinate with the interpretive themes of the proposed Interpretive Center. Eastward, the Park is shown expanded by 8.8 acres into the City-owned Uniroyal site. This increases the proposed Park to 16.14 acres to accomodate participatory functions and to increase public access to the River. One of the three existing buildings on the site is proposed to be demolished, while the two remaining are proposed for re-use. The large Re-Steel Corp. building is proposed as a sheltered area by removing walls and leaving structure and roof. The concrete block building facing Mt. Elliott is proposed to be re-used as a storage, concession and office building.

The park functions include the following activities and areas:

- . **Overlook** Located at the river's edge at the foot of the Mt. Elliott Street right-of-way, it provides a hard surface area extending into the river with telescopes to view Coast Guard activities, Belle Isle, Canada, shipping vessels, and other activities happening along the river.

- . **Fishing Area** Located at the river's edge next to the Overlook, it provides ameni-

ties for fishing, such as pole supports, seating, water faucets, and various levels of different sizes for intimate, as well as group, fishing. Safe areas are provided for barrier-free fishing access.

- . **Promenade** Continuing eastward along the river's edge across Uniroyal to the Belle Isle Bridge, a promenade allows for continued access to the river and includes lighting, seating, telescopes, and interpretive signage noting points of interest.

- . **Contoured Seating** The existing grade of Mt. Elliott Park (4-5' above Mt. Elliott Street) is utilized by contouring the grade at the southwest corner of the site to allow for wide grass steps for sitting and viewing of Coast Guard and river activities and for impromptu picnics (although no specific picnic facilities are provided in this area).

- . **Nautical Monument** Located at the top of the seating area, visible from the river and the central plaza, is a monument dedicated to a significant nautical event or disaster, such as the sinking of the carrier Edmund Fitzgerald. This monument will be the terminus of the Interpretive Center Walking Trail.

- . **Interpretive Walking Trail** Located in the center of Mt. Elliott Park is a trail that has linkages to the Interpretive Center and continues the interpretive theme outdoors. The trail is based on the Great Lakes, their history, natural geography, existing use, and future. Signage, plaques, relief in the walk and walls, and free standing displays can tell stories in an intriguing way. Rolling topography, land-

scaping and natural flower areas make the path a more pleasant and enclosed experience.

. View Hill Set to the rear of the site, away from the river, a five foot to seven foot hill rises parallel to the north line of the site undulating in and out, up and down, for interest. This hill is to increase the view of the river from the back of the site. This hill extends under the adapted steel frame building raising the ground to increase the potential view of the river from that point.

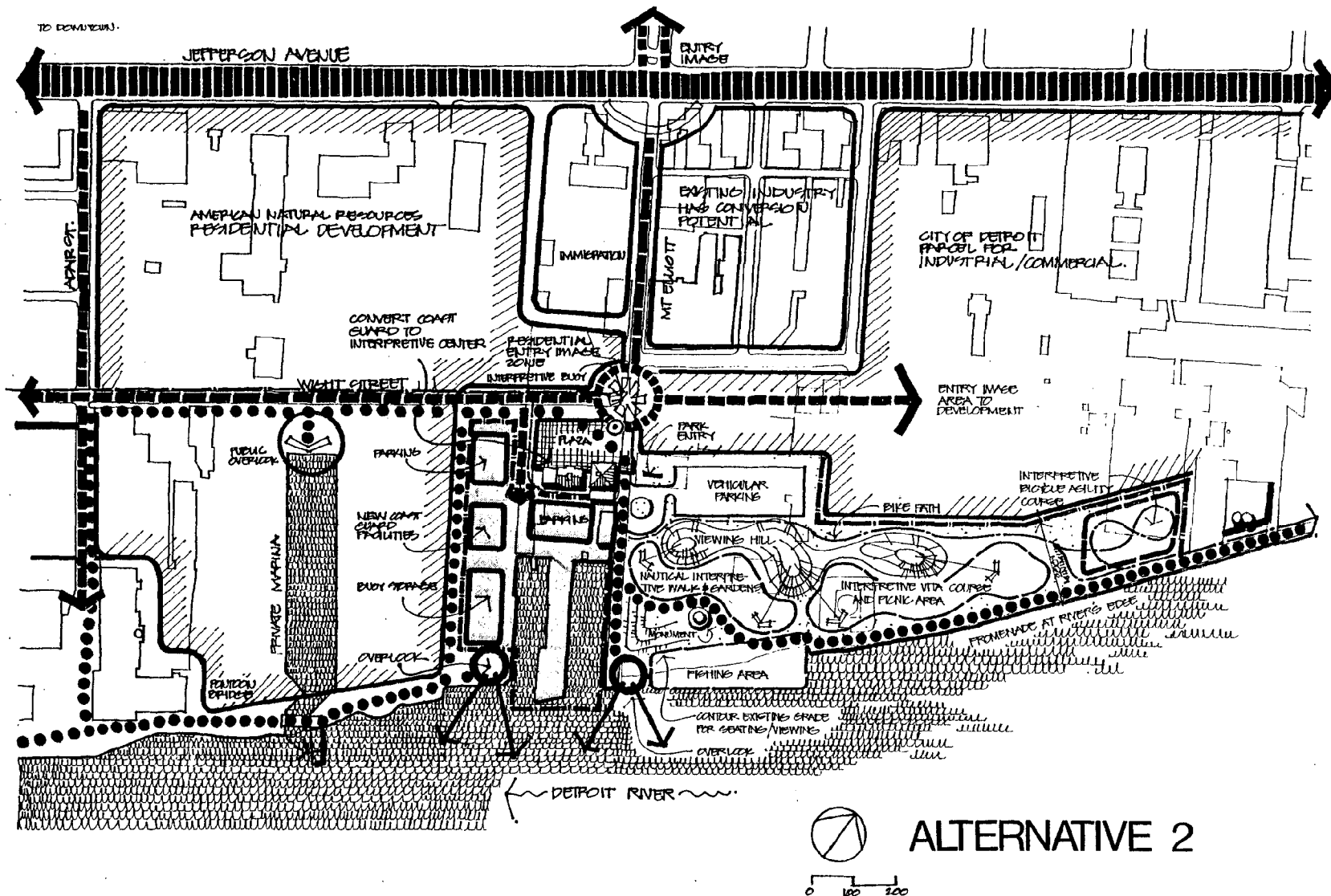
. Children's Physical Fitness Interpretive Play Area This play area is located on the view hill beneath the adapted steel frame shelter to allow for rainy day and extended winter use. The play area is based on a fitness theme, yet has a myriad of activities appealing to youngsters.

. Bicycle Agility Course The bicycle path passes through the site from Mt. Elliott along the northern edge (to avoid pedestrian conflicts) and then to the promenade at approximately 200-300 feet west of the east border. In this 200-300 feet, a Bicycle Agility Trail is located that tests one's bicycle skills, as well as providing information on bicycle safety, use and limitations.

. Interpretive Jogging Course This jogging/exercise trail winds around the site and provides the opportunity for people to exercise out-of-doors at their own pace. Signage tells the user not only what to do, but what effect the exercise has on conditioning and overall physical and mental health.

. Seating Game Table Area Seating and game tables are located under the adaptive steel frame shelter between the plaza and the children's play area. It is intended as an area for seniors and parents to watch children at play and the activities in the plaza area. Game tables include chess, backgammon, checkers and the like.

. Picnic Area An area is provided in the center of the Park for picnics. This place provides for shaded as well as sunny areas, and has tables, benches and barbecues provided.



Alternative Two

This land use and circulation proposal assumes the same development concepts as Alternative One but to a lesser degree of intensity. The A.N.R. residential development is assumed to provide its own recreation with a marina bisecting the site. Riverfront access is still maintained across the marina by a floating bridge that swings open when boats approach.

Warehouse conversions north of the Park site are projected to occur at a slower pace and less intensive level. The City-owned Uniroyal parcel may be redeveloped for new industry, a research park or commercial use.

In this Alternative the Mt. Elliott Park takes less land area. The northern 200 feet of the original park area north of the parking lot is traded for a portion of the City-owned Uniroyal parcel adjacent to the Detroit River east of the park site. This would extend 300 feet back from the river at the Mt. Elliott site and narrow to a minimum of 100 feet at the eastern extremity. The total trade would involve relinquishing two acres of the northern part of Mt. Elliott for 4.8 acres along the river, for a total park of 10.14 acres.

This smaller park (as opposed to Alternative One) is suggested for several reasons:

1. A smaller park area demands lower development, maintenance and surveillance costs.
2. The portion acquired by Uniroyal could be improved and maintained by Uni-

royal development since it acts as a major access to the development.

3. The 200-300 foot dimension is the average distance back from the river that allows users to still relate to water activity.

The land trade to acquire the Coast Guard buildings for the Interpretive Center is similar to Alternative One. The 50 foot easement at the river's edge extends the riverfront promenade along to an overlook at the Coast Guard Station.

Pedestrian access to the river is maintained along the A.N.R. site. A major pedestrian area and overlook is proposed at the Adair St. Warehouse. The pedestrian access along the river turns north from the shore at Adair Street and crosses through the development at Wight Street. Added excitement is created through visual access to the river where the A.N.R. marina meets a mini-park at Wight Street. Public access continues east to the plaza at the Interpretive Center, through Mt. Elliott Park and along the waterfront to Belle Isle.

A plaza in front of the Interpretive Center is extended only to Wight Street. The area north of Wight is improved by A.N.R. as the major entry for that development.

Due to less intense development proposed in this Alternative, the parking structure is no longer provided northwest of Mt. Elliott and Wight. Surface level parking remains in use by the Immigration facility during the week and is proposed opened to the public on weekends. A 70-car lot is provided on the

Mt. Elliott site for users of the park and the Interpretive Center. A drop-off is located between the parking lot and the Interpretive Center.

Functions in the park are similar to those in Alternative One. The Re-Steel building and the concrete block building are removed to make way for the land trade and parking. For access and security reasons, comfort facilities and a shelter are provided in small structures near the drop-off area. The overlook, fishing area, promenade, contoured seating, and nautical monument are similar to Alternative One. The Interpretive Walking Trail, View Hill, Bicycle Agility Course, and the Interpretive Jogging Course are all reduced in scale to fit within the limited area of the park. The Seating and Game Table area is incorporated into the entry plaza in front of the Interpretive Center.

Alternative Three

This alternative assumes the Mt. Elliott Interpretive Center is not immediately implemented. This might happen for several reasons:

1. The funding for eight development or for operation is not immediately available and so defers the Interpretive Center to a later time.
2. Potential participants initially showing interest are not able to create exhibits or displays for the Center.
3. Operators are not available for the concession functions within the buildings.
4. A trade with the Coast Guard cannot be fully negotiated.

If the Interpretive Center is not developed immediately, or at all, the Mt. Elliott Park can still succeed as indicated in either Alternative One or Alternative Two. Development can occur around the Coast Guard buildings, setting the stage for eventual adaptive re-use. This would presume Coast Guard retention of ownership of the buildings for safekeeping in the immediate future while any negotiations required take place.



LAND USE ISSUES

Some future uses and configurations of land adjacent to the Mt. Elliott Parks and the Interpretive Center are as yet unresolved, therefore, five issues (riverfront access, buoy storage location, Coast Guard expansion, potential road closings, and development entries) are developed with alternative solutions.

Riverfront Access

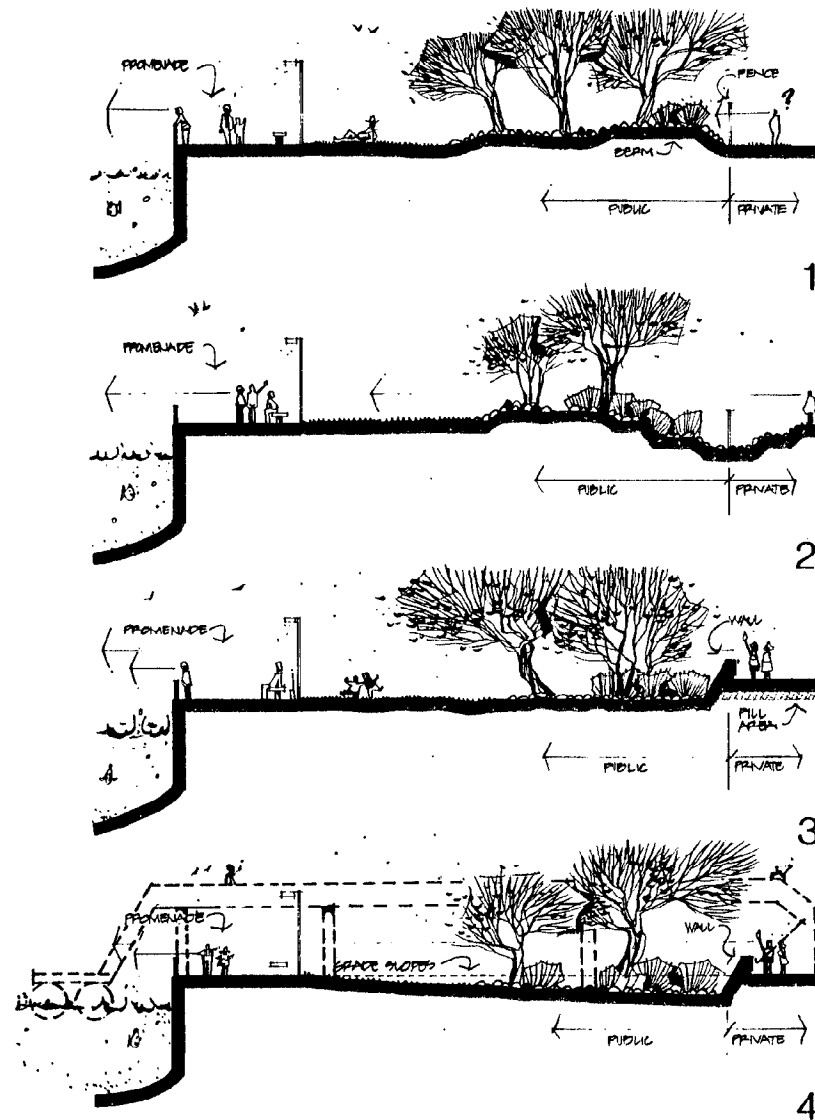
Public riverfront access at private developments has generated a major concern over issues of privacy, security, and marketability versus issues of recreation and public interest. In the area west of the Mt. Elliott Park, proposed by A.N.R. for residential development, four of the many methods of resolving these issues are shown. Not shown is the ideal solution in which public access and private development blend without designed separation.

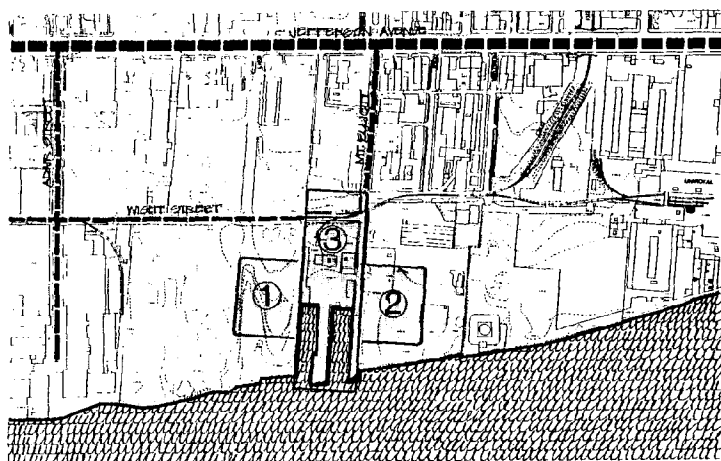
In light of developers' concerns for security, the following alternatives are suggested:

1. A promenade is placed along the river's edge, with a berm screening the public from the private. A fence provides additional security. The berm, however, could disrupt the view of the Detroit River from the private development.

2. A promenade is placed along the river's edge and separated from private development by a landscaped area. At the back of the public area, the ground drops to form a trench with a wall or fence out of site and not obstructing views. However, the trench itself may become a maintenance or security problem by collecting trash or providing a place to hide.
3. Private development is raised above the public areas, allowing for a grade separation as well as visual connection to the river over the public area. The amount of fill required to raise the site could, however, become costly.
4. This method provides for separation by gently sloping the grass and planting area of the public promenade away from the river, which when reaching a depth of four feet, terminates in a wall rising seven feet six inches. This is the recommended way of providing the separation since it does not obstruct either the public view or the housing area view of the river.

In all cases, access to the river by private development could be achieved by way of an elevated walkway as shown in Alternative Four. A stair winds up to a level 10' above the promenade to a bridge that crosses the public area to a river overlook. Another series of steps may lead to a floating pier in the river. Through variations of this methods, public and private interests can be met while creating improved vistas and sheltered areas.





**COAST GUARD
EXPANSION**

Coast Guard Expansion

The proposed Coast Guard expansion includes only a moderate increase in the Coast Guard property, but more importantly, new structures and land configuration will allow the Coast Guard to perform functions more efficiently and with greater speed. Three alternative directions are explored:

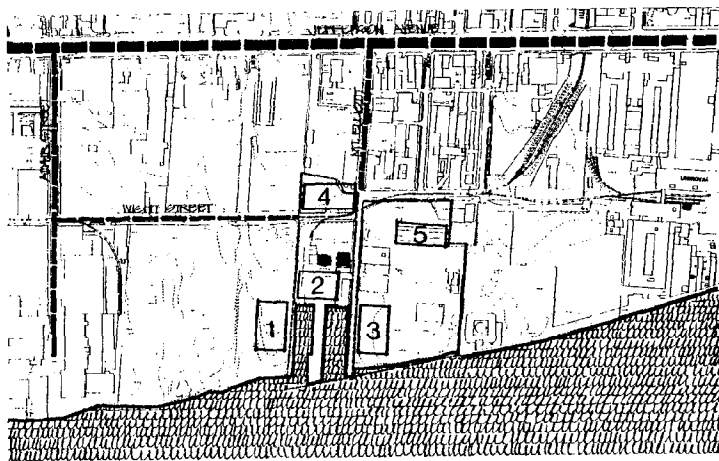
1. This option would exchange 2.5 acres of the Coast Guard property (including the historic buildings, the ground area they are sited on, and the buoy storage area north of Wight Street) with 3.2 acres of the City of Detroit parcel to the west. The proposed western boundary is shown 250 feet from the present western Coast Guard property line. The southern boundary is shown 50 feet from the river (allowing for public easement). The north-to-south dimension of the proposed parcel is 500 feet. This location is advantageous because it greatly facilitates movement between ships, building and storage, and because the property to be traded is already city-owned and would not have to be acquired. It's easy access from Wight Street facilitates entry and removes Coast Guard operations from the proposed recreation functions on Mt. Elliott Street.
2. This option exchanges the same Coast Guard property noted in option 1 for a 3.2 acre parcel to the east of the Coast Guard base. This option has the advantages of removing the Base functions from the proposed housing development and utilizes the seawall already existing along the east side of the slip. Several prob-

lems do exist. The trade would involve closing or relocating the Mt. Elliott public right-of-way to the river. This is currently against City policy and would involve a decision by Council. The trade would also involve relinquishing land obtained with Land and Water Conservation Funding (which contradicts criteria that land acquired with this funding remain in public recreation use in perpetuity). Another problem is that in the Mt. Elliott right-of-way is a large storm sewer outflow to the river. This would make construction in this area impossible or extremely costly. The largest concern is that the trade to the east infringes on valuable park land and segregates a necessary connection between the Interpretive Center and the Mt. Elliott Park.

3. This option shows the Coast Guard site as it presently exists and is presented in the event that the Coast Guard decides not to expand or that the City does not find the necessary funding or users to operate in the Interpretive Center.

It should be noted that while option number one is preferred and is shown in the suggested site plan, variations derived through negotiations between interested parties may yield optimum benefit. It may be possible for the Coast Guard to consolidate their new requirements by massing some of their proposed new building into two stories by Wight Street. Or more radically, the Coast Guard could lease their rights to the roofs of new

buildings to developers of adjacent housing for incorporation into the residential design as plaza space or river overlooks. It is recognized that this could be achieved only if security and safety requirements could be met. However, it is felt that creative solutions may yet be available that will maximize use and assist residential/Coast Guard interface.



**BUOY STORAGE
LOCATIONS**

Buoy Storage Locations

One of the functions of this Coast Guard Base is the repair and replacement of aids to navigation in the Great Lakes. This requires storage on or adjacent to the Base for buoys that are being refurbished, out of season (there are winter buoys and summer buoys), or for large replacement parts (anchors, chains, cages, spares, nuns and cans). This buoy storage yard has alternatively been described as a visually intriguing function related to the nautical lore and romance of the area or an industrial eyesore. Therefore five options are described:

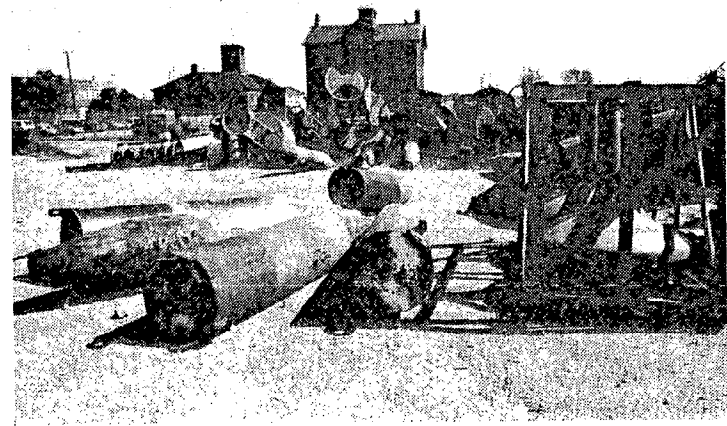
1. The recommended location for buoy storage is directly west of the Coast Guard slips. This assumes the Coast Guard Base is expanded to the west - this location has been recommended by the Coast Guard officials as the most desirable and has the advantage of being located away from the park area for safety and security reasons. The only reservation about this location is that the view of the storage might be undesirable to, and cause negative reactions from, potential residential developers of the City of Detroit parcel to the west.

2. This storage location would have the same ease of operation as the first and would not be adjacent to either the park or the housing development. Being in the center of the Coast Guard activities, this location would be extremely inconvenient, interfere with the operations of the Base, and not be desirable to Coast Guard officials.

3. The third location assumes Coast Guard expansion to the east. This option has all the advantages of the first and would be just as desirable if the Coast Guard expansion were to the west. However, this would require relocating Mt. Elliott Street, possibly restructuring or relocating the storm sewers below Mt. Elliott, and relinquishing land obtained with Land and Water Conservation Funds.

4. This is the present location of the buoy storage and can remain so if Wight Street does not become an entry to the proposed A.N.R. development. However, it is not a convenient location since buoys must be transported via lift or truck through development and recreation land. Storing buoys this far from the docks not only continues an inefficient and time consuming practice, but now become hazardous since storing and moving these massive steel structures around the public may cause injury.

5. This proposal stores the buoys in the existing Re-Steel building and has the advantage of completely removing them from sight for those concerned about the aesthetics of buoy storage. It does, however, pose all the safety problems of storage off-site plus occupies valuable park land and the play and seating shelter.



Existing bouy storage across Wight at the Coast Guard Base.

Development Entries

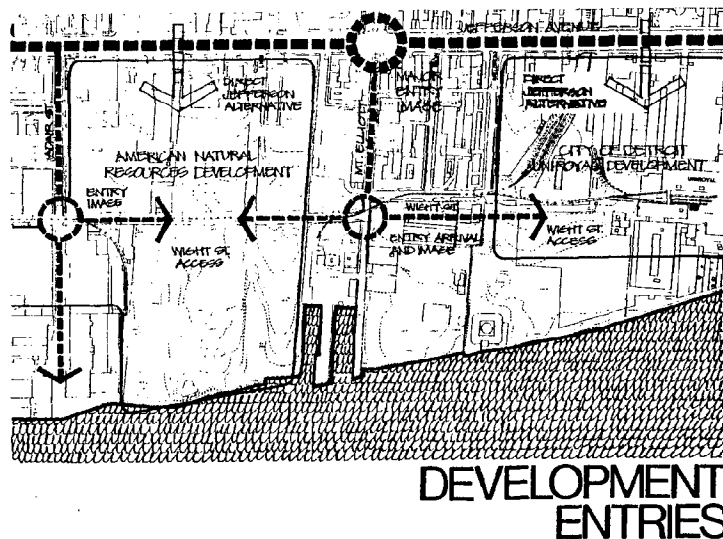
Surrounding Mt. Elliott Park and the Interpretive Center are several development areas. These include the Uniroyal development area, the American Natural Resources development area, the industrial buildings north of Wight and east of Mt. Elliott, and the Adair Street warehouse conversion.

The entries to these areas are crucial to circulation flow and proper stimulation of development necessary to maintain the vitality of the area.

Both Uniroyal and American Natural Resources have frontage directly on Jefferson. The need for access from Jefferson Avenue becomes a question of type of development, the need for identity and visibility from Jefferson, and control and security. Direct access off Jefferson would be necessary for commercial/office development, whereas access from an improved Mt. Elliott by a park would be more desirable for housing development.

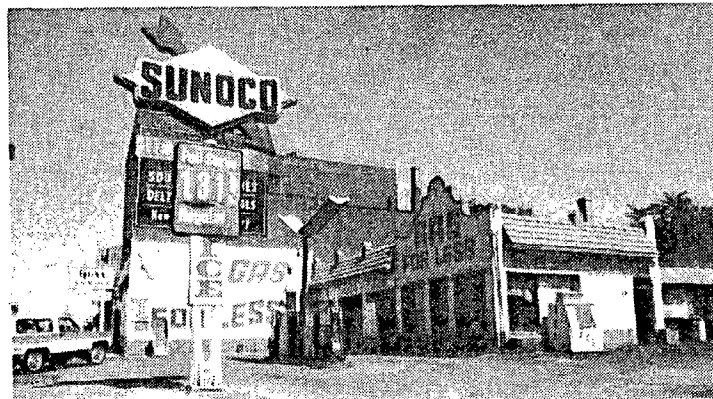
Adair Street becomes the major access between the Adair Street Warehouse Conversion and Jefferson Avenue. It can also act as a western entry to the American Natural Resource Housing development.

The major entry to the Mt. Elliott Park and the Interpretive Center is at Jefferson Avenue along Mt. Elliott Street. An entrance image is created by a mini-park developed at the vacant gas station on the southeast corner of Jefferson and Mt. Elliott, which opens a

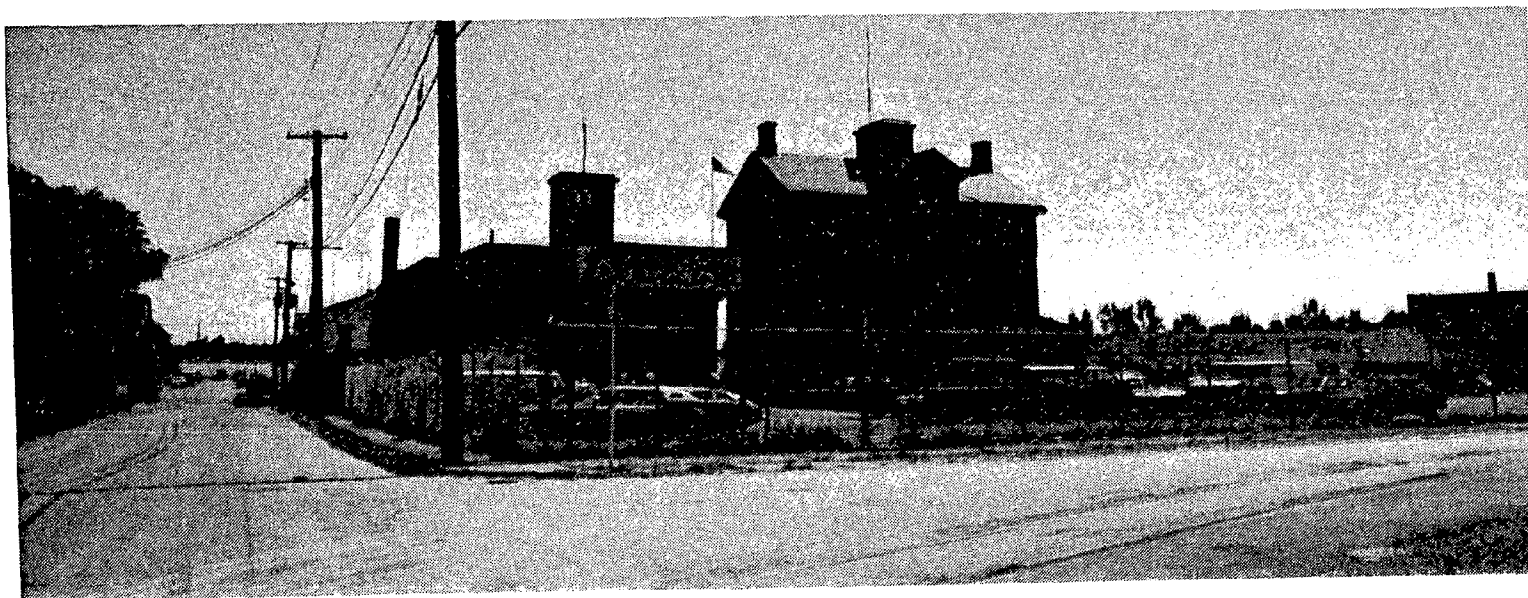


vista and balances the already attractive image generated by the Immigration Department across Mt. Elliott.

Vehicular traffic down Mt. Elliott terminates at a drop-off plaza which defines the Park and orients the user to parking and specific attractions, such as the Interpretive Center. At this point vehicles can turn east or west for movement into or through developments.



This vacant gas station at Mt. Elliott and Jefferson is proposed to be removed for an entrance mini park.



The intersection at Wight and Mt. Elliott. Mt. Elliott from this point to the river is proposed as a pedestrian promenade. Wight is proposed as an entry to the ANR Development.

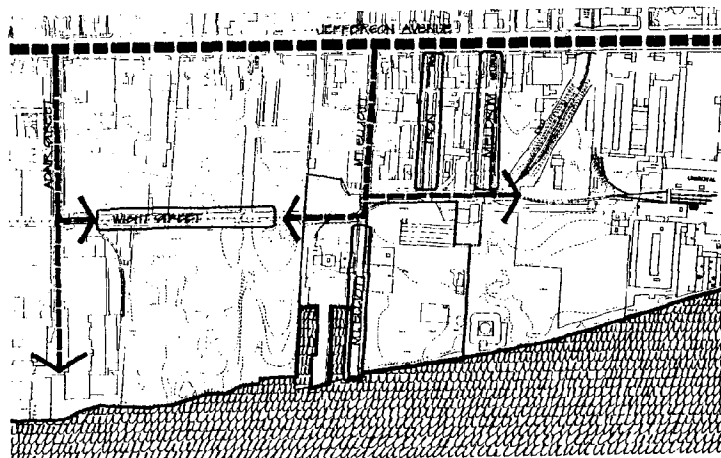
Potential Road Closings

It is a natural development of the project area undergoing major land use changes that certain streets be expanded and others be closed. Mt. Elliott Street is proposed to become a major connector to Jefferson. The potential for conversion of the industrial buildings north of Wight and east of Mt. Elliott to pedestrian oriented use might eliminate the need for Iron and Meldrum Streets.

It is proposed that the northern portion of Meldrum be maintained as a service access to the conversion and Iron Street is transformed to an enclosed pedestrian mall connecting Jefferson to Wight.

Mt. Elliott Street south of Wight is closed to automobile traffic and becomes an integral part of Mt. Elliott Park as a promenade connecting the drop-off circle to the overlook at the river.

The closing of Wight Street to automobiles could become necessary to limit traffic through the proposed residential areas. This is left to the discretion of the planners of the development. However, pedestrians and bicycles should still be allowed access east-west through the development.



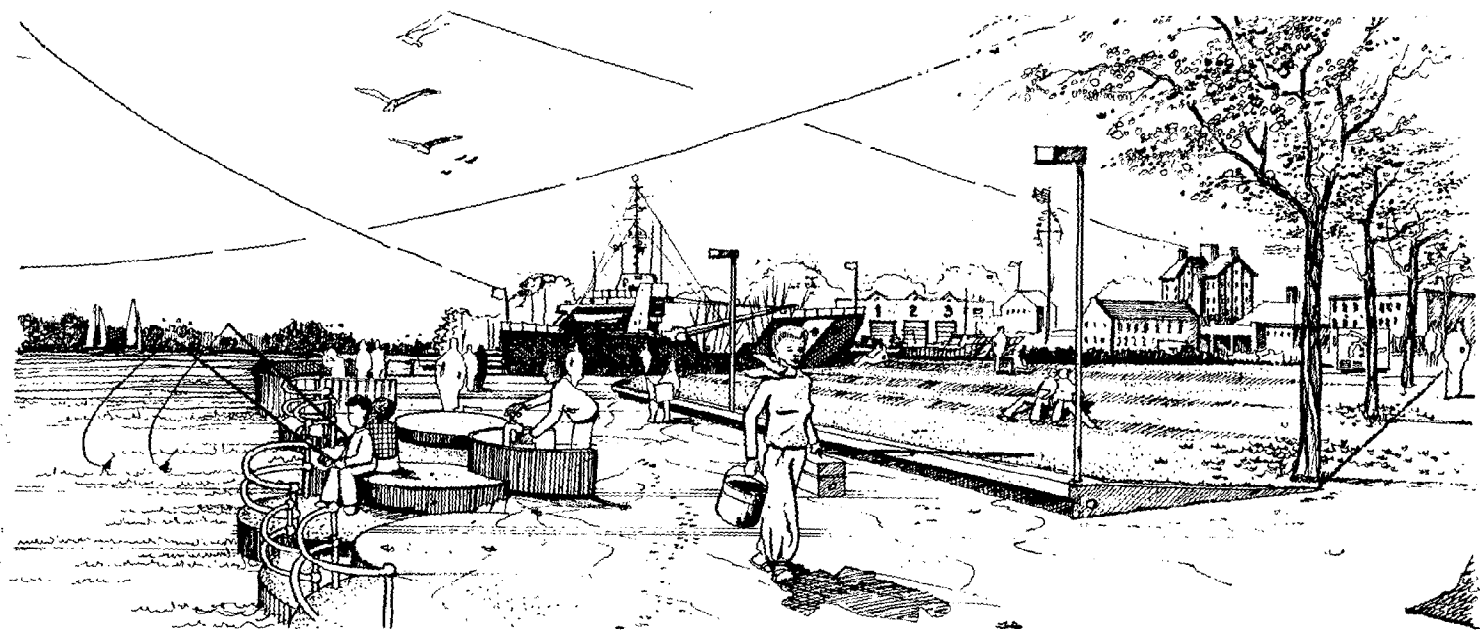
POTENTIAL ROAD
CLOSINGS

SITE PLAN

The concepts proposed in Alternative One of the Proposed Land Use and Circulation chapter of this report are developed and graphically depicted in the Site Plan. This is the recommended alternative which achieves the greatest impact and encourages development of adjacent properties. The land use program was developed and modified through a series of meetings with personnel from the City's Recreation Department and Planning Department, and representatives from the Immigration and Naturalization Bureau, the U.S. Coast Guard, American Natural Resources and many others.

The predominant center of public activity occurs along a spine created by Mt. Elliott Street. This center of development is flanked on both sides by large parcels to be developed for mixed-use with residential as its primary function. To the far east is the City-owned Uniroyal parcel, to the immediate east is the recently City-purchased Warnoc Spring complex, and to the west is the American Natural Resources parcel.

The intersection of Mt. Elliott and Jefferson is the main entry to the project area and is



A view of the Mt. Elliott Park riverfront shows fishing, overlook, contoured seating, Coast Guard activity viewing, and the Interpretive Center in the background at right.

enhanced by a mini-park and entry image where a dilapidated gas station presently stands. Mt. Elliott Street is proposed to be repaved and landscaped with shade trees. The sidewalks are proposed to be replaced and enhanced with new lighting and pedestrian amenities.

East of Mt. Elliott the existing warehouse and industrial buildings are proposed for conversion to commercial use on the ground floor and portions of the second level. The remaining levels have the appropriate bay spacing and dimensions to be converted to residential use. Connecting the two major buildings over Iron Street is a proposed glass enclosure creating a pedestrian mall linking Jefferson to Wight, which creates a viable year-round shopping area.

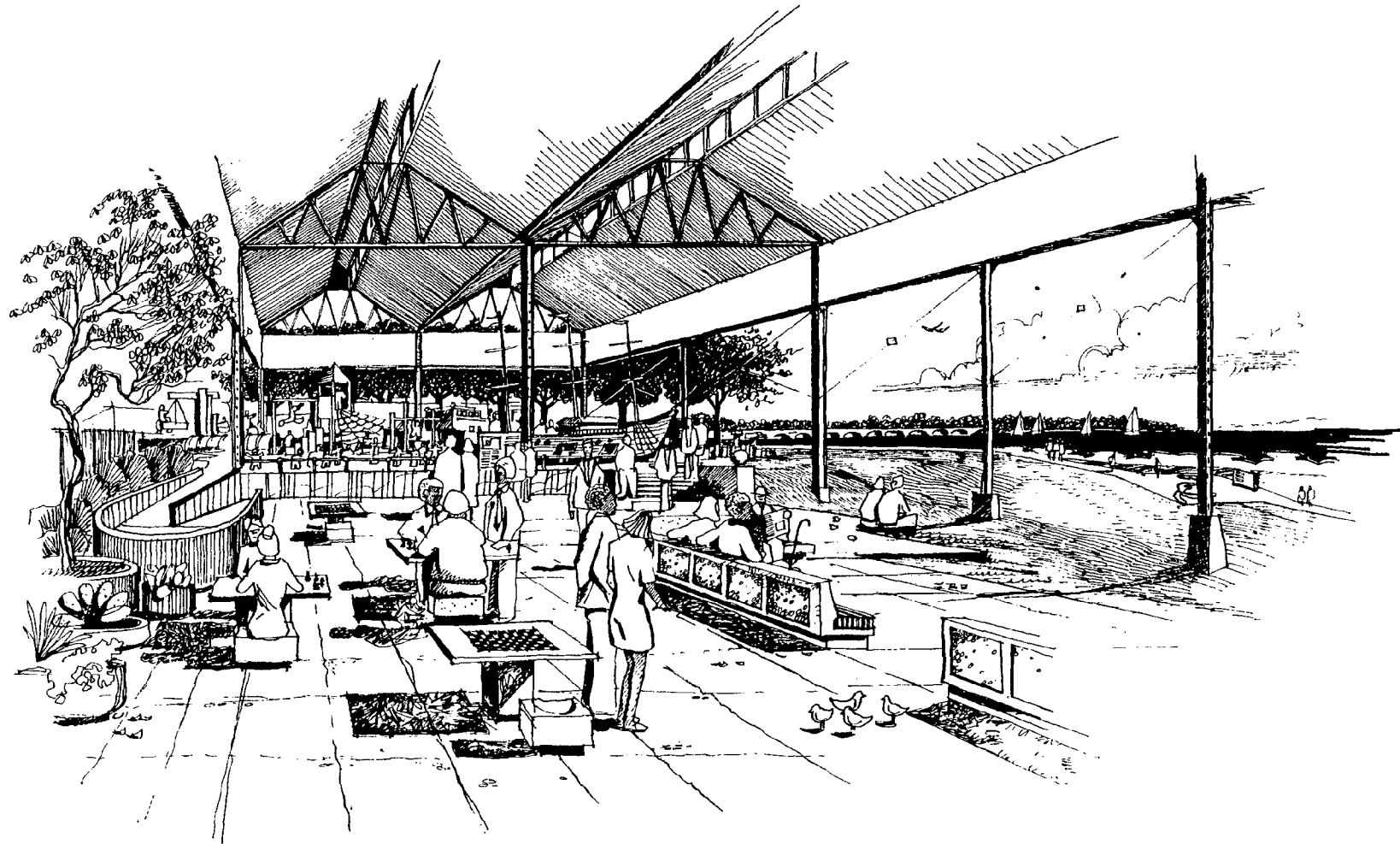
West of Mt. Elliott a three level, 300 car parking structure is shown to accommodate the intensity of proposed development. At the foot of Mt. Elliott Street is the proposed drop-off plaza and turn-around. This plaza will form the central gathering space for the Interpretive Center, Mt. Elliott Park, and the Warehouse Conversion, and includes auto drop-off, seating, a mini-amphitheater, the Interpretive Buoy, and the beginning of the Marine Interpretive Walk.

The Coast Guard Base is expanded to the west to include an additional 3.2 acres with new development, including a light industrial building, administration building, storage and boat shelter space, buoy storage, the M.S.O. office, parking, and an improved western edge of the slip with a boat hoistway/launch.

Mt. Elliott Park is programmed to have an intense interpretive theme and designed to have a natural appearance relating both visually and aesthetically to the river. The active functions included in the Park are fully described in Alternative One of the Land Use and Circulation Alternatives.

Generally, the Park includes the adaptation of the large steel industrial building to a covering for the children's physical fitness play area, seating areas, and game tables, and conversion of the concrete block building next to Mt. Elliott Street to concessions, maintenance, office, storage and comfort facilities. Also, in the Park are picnic areas, interpretive jogging course, the promenade, river edge fishing, seating and viewing areas, an overlook with view telescopes, a marine interpretive trail, a bike path and agility course, and a nautical monument.

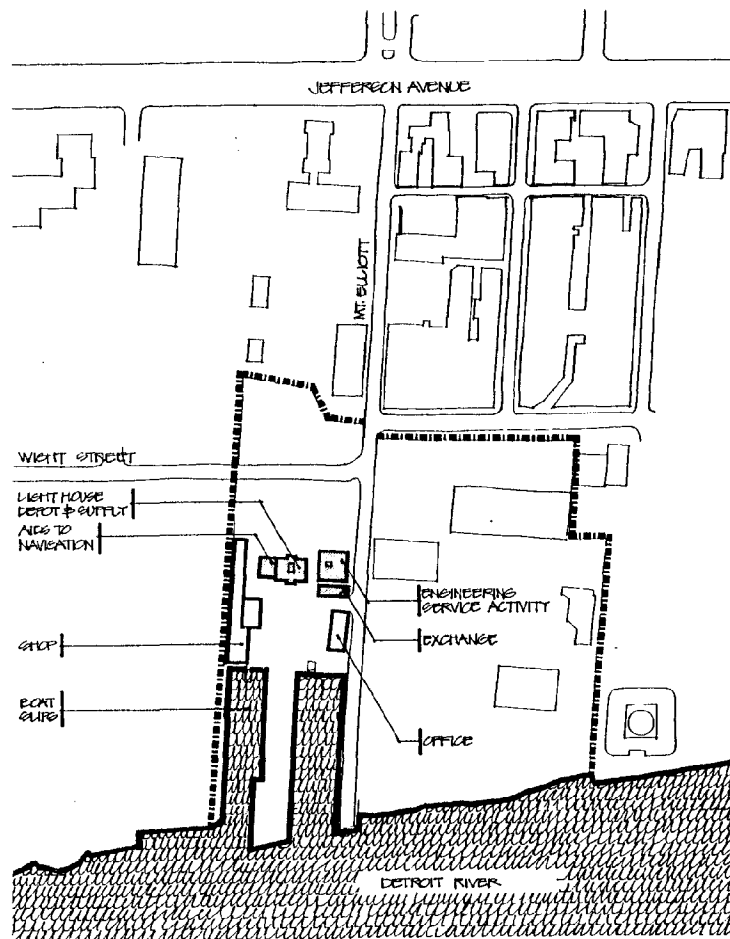
A public promenade maintaining pedestrian access along the river passes through the American Natural Resources development.



A view into the Re-Steel building, converted as a shelter, shows the seniors area, game tables, and children's play area.



A view of the Lighthouse Supply Depot and the Aids to Navigation building from the southwest shows its present utilitarian condition.



INTERPRETIVE CENTER DEVELOPMENT

BUILDING ASSESSMENTS

The general site of the Interpretive Center is composed of four sub-sites including the area developed for the Interpretive Center, the proposed reorganization of the Coast Guard Base, the Mt. Elliott Park Site, and the newly announced American Natural Resources housing site. The Interpretive Center sub-site contains three buildings which are currently used by the Coast Guard, but are proposed for adaptive reuse as the Interpretive Center.

The first and most prominent is the Lighthouse Depot Building consisting of four stories, a substantial attic, and a basement. The Lighthouse Depot is currently used for the storage of supplies, office space, and a recreation deck. A one-story building attached to the west wall of the Lighthouse Depot houses the Aids to Navigation shop.

The second most prominent building is the Engineering Services Activity (E.S.A.) building, located just east of the Lighthouse Depot Building. It is a three-story structure with a partial basement and is currently used as a machine shop on the first level, offices on the second, and storage on the third.

The third and smallest building is the one-story Exchange Building. It is attached to the E.S.A. Building on the south side by a recently installed passageway. The Exchange Building was originally built as a garage, but is currently used as a retail outlet for the Coast Guard Base Exchange.

Lighthouse Depot and Supply Building

Year Constructed: 1871-1874

Builder/Architect: Major Orlando M. Poe

Materials: Foundation: Ashlar Stone
Exterior Walls: Brick
Roof: Sloping slate shingles on iron trusses
Gutters: Copper

Structure: Masonry bearing walls with iron columns, floor joists and roof trusses.
Wood floors on brick vaults.

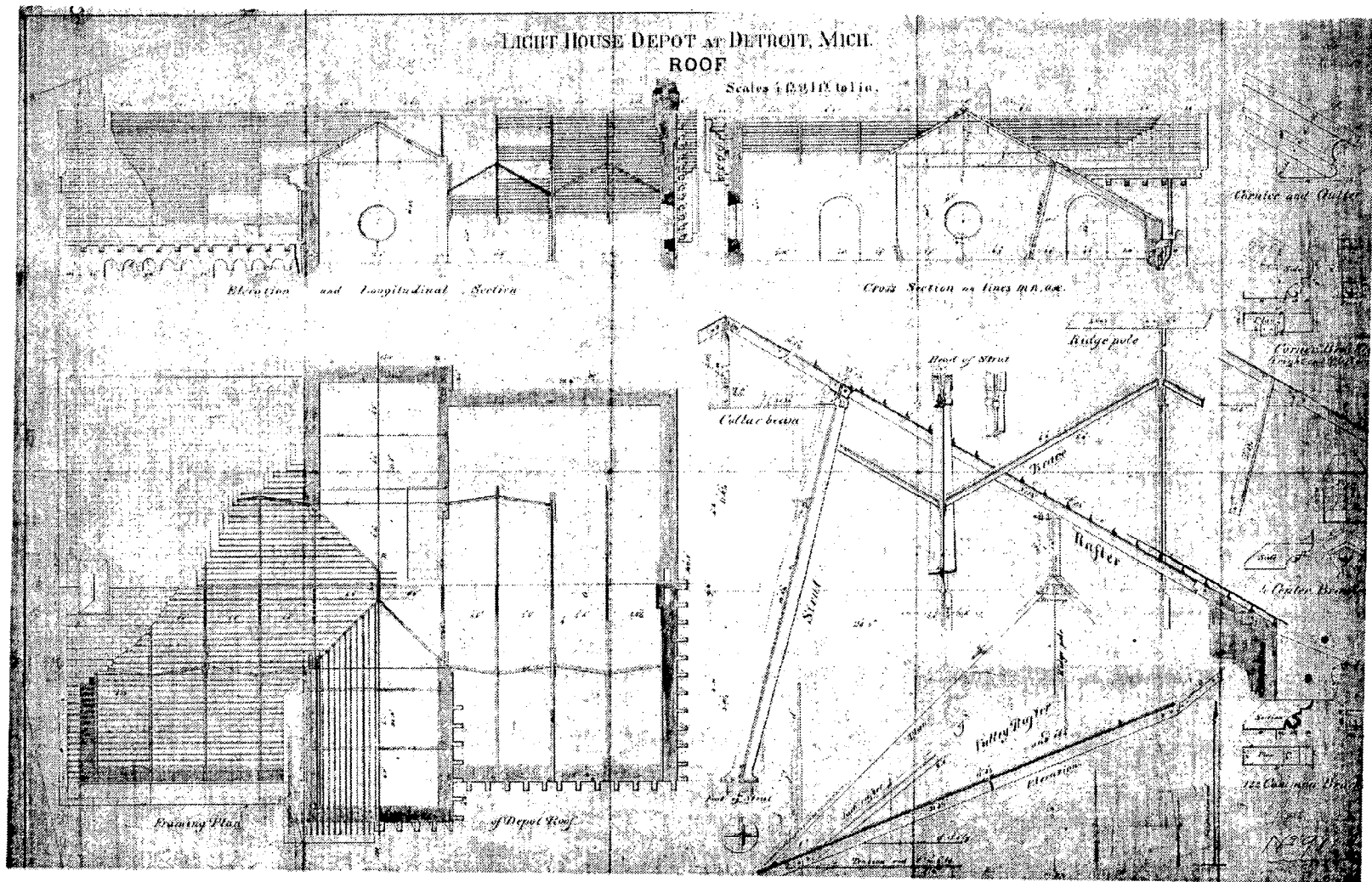
Summary	Entrances				Area
	N	S	E	W	
Level 1		I			1992
Level 2		I			1992
Level 3					1992
Level 4					1992
Level 5 (attic)					1992
Total sq. ft.					9960

This description is taken directly from the National Register of Historic Places Inventory prepared by a historic preservation consultant to the U. S. Coast Guard Ninth District. Corrections or additions are in brackets.

"The Detroit Light House Depot is located on the Detroit River in an older industrial section of the City. It stands within the U.S. Coast Guard Base Detroit compound. It is a three-story and basement building in the Romanesque revival style. The building is 40 feet by 60 feet in size. It is five bays from both the facade and rear of the building. It has brick bearing walls with iron floor joists.

The building rests on an ashlar stone foundation, which has been painted red. At the rear, the round-arched basement entrance features a rock-faced surround with a large keystone; the foundation of the central bay features rock-faced quoins. At the front, the round-arched main entrance is at the first floor (there is a change in grade) and is reached by a double flight of stairs. The words "LT. HO./DEPOT" appear in relief in the stonework flanking the entrance. The date "1871" appears in the keystone above the doorway. Both the front and rear entrances feature round-arched double doors made of cast iron and painted black.

Above the basement, the building is constructed of red brick set in stretcher bond. Each bay is vertically divided by projecting brick piers. Brick and stone string courses divide the first and second, and the second and third floors. The building is distinguished by round-arched windows with stone,



Original working drawings of the Lighthouse Depot showing roof structure.

or brick and stone hoodmoulds. The hoodmoulds in the central bays are made of smooth dressed stone, those in the flanking bays and on the sides of the building are made of a double row of brick headers, with stone keystones. There are four circular attic windows, each with smooth dressed stone surrounds and four keystones. All of the building's original wooden sash with 2/2 lights recently were replaced with metal sash with 1/1 lights. The original circular attic windows are still intact. The building originally had round-arched metal shutters on each window; these have been removed.

At the top of each rank of windows there is arcaded corbelling. The gable roofs of the central bays intersect with the gable roof of the main block. The roof is made of rectangular slate shingles, and there are integral copper gutters (facias and soffits). There are two inside end chimneys with open arcades. A rectangular brick cupola rising from the center of the roof was added much later to house the machinery for the present elevator. On the west side of the building, a one-story engine repair shop was added about 1920 (in 1915).

Inside, the building is symmetrical in plan. A central hall accommodates the elevator and, to one side, the stairway. On each side of the central hall are two storage rooms; the entrance to each room features double, round-arched doors made of cast iron. The same plan is followed throughout the three stories and basement. The inside walls are brick, and there are brick vaulted ceilings throughout. The roof is supported

by iron trusses. Half of the first floor recently was remodeled for use as an office; the cast iron doors were removed, wood paneling was applied over the walls, and a dropped ceiling was added. Part of the third floor has been partitioned, but is otherwise intact." (No plumbing facilities exist in the building outside of a simple drinking fountain. No heating facilities exist in the building except electric baseboard units which warm the recently remodeled office areas.)

Measured drawings of the Lighthouse Supply Depot and the Aids to Navigation Building follow the written assessment of the Aids to Navigation Building.

Aids to Navigation Building

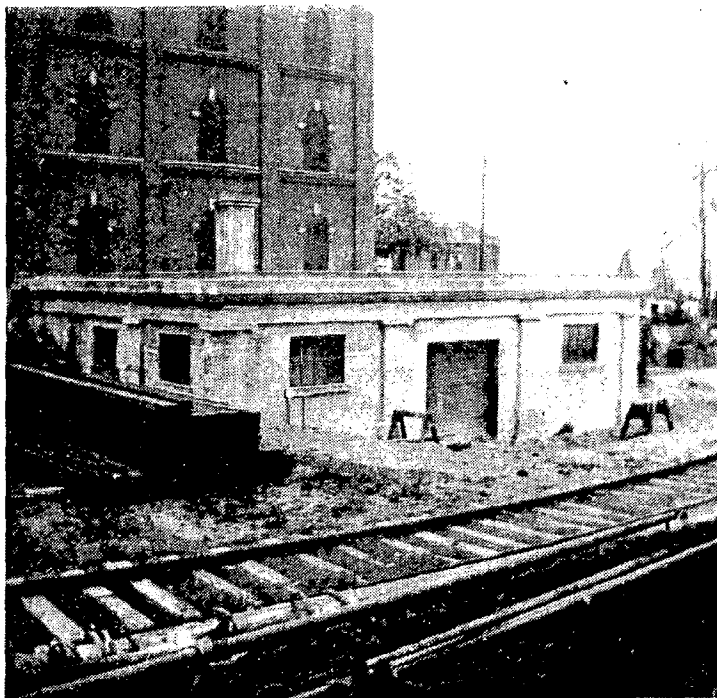
Year constructed: 1915

Builder/Architect: Unknown

Materials: Foundation: Concrete
Exterior Walls: Cast in place reinforced concrete
Roof: Flat, built-up on reinforced concrete on iron trusses
Gutters: None

Structure: Reinforced concrete with iron roof trusses

	Entrances				Area
	N	S	E	W	
Level 1		2			1275 sq. ft.



The Aids to Navigation Building addition to the Lighthouse Supply Depot, circa 1916. Note the railroad tracks and the absence of the crane bay.

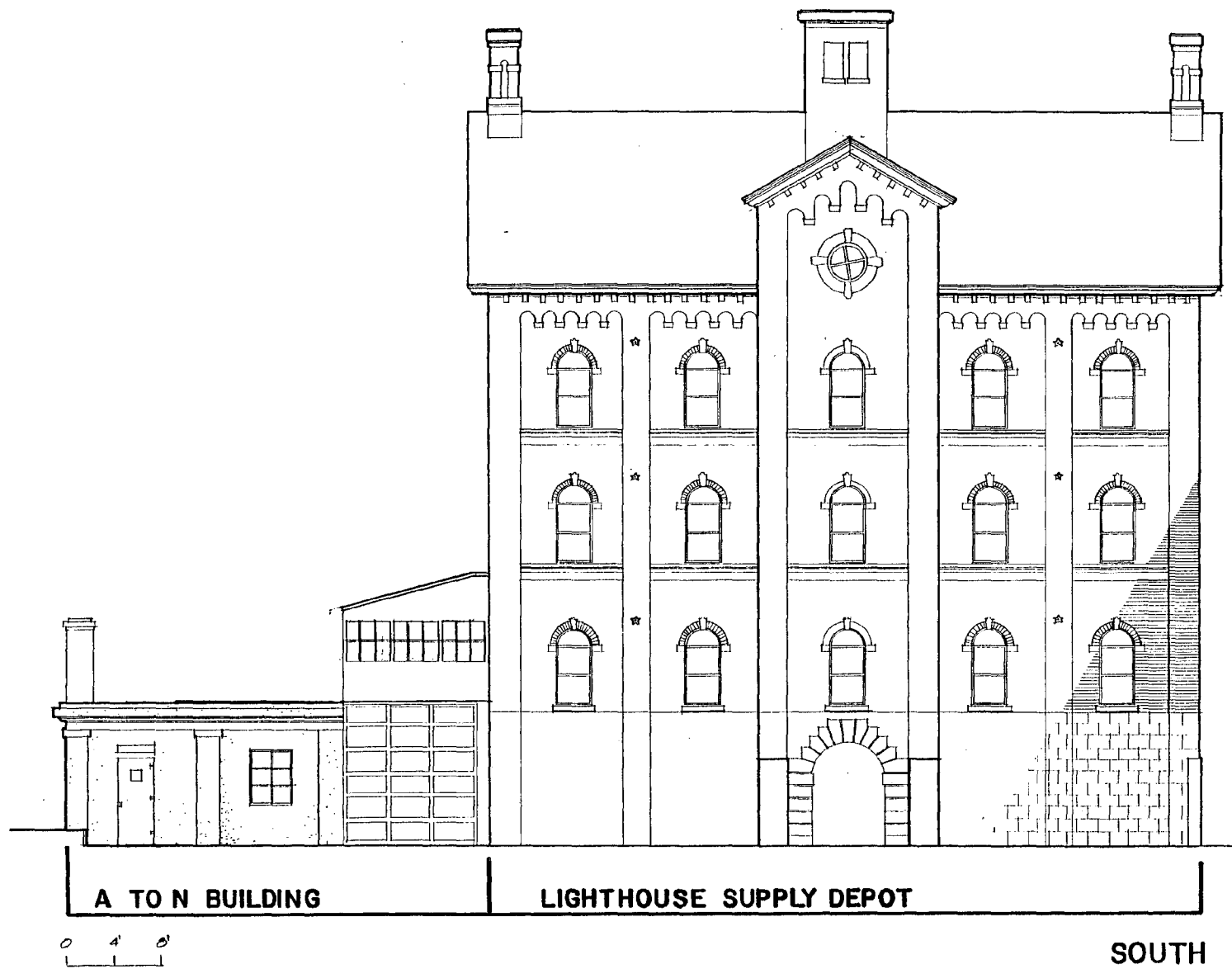
The Aids to Navigation Building was added to the Lighthouse Depot and Supply Building to act as a repair shop for aids to navigation. No passages exist between the Lighthouse Depot and the building.

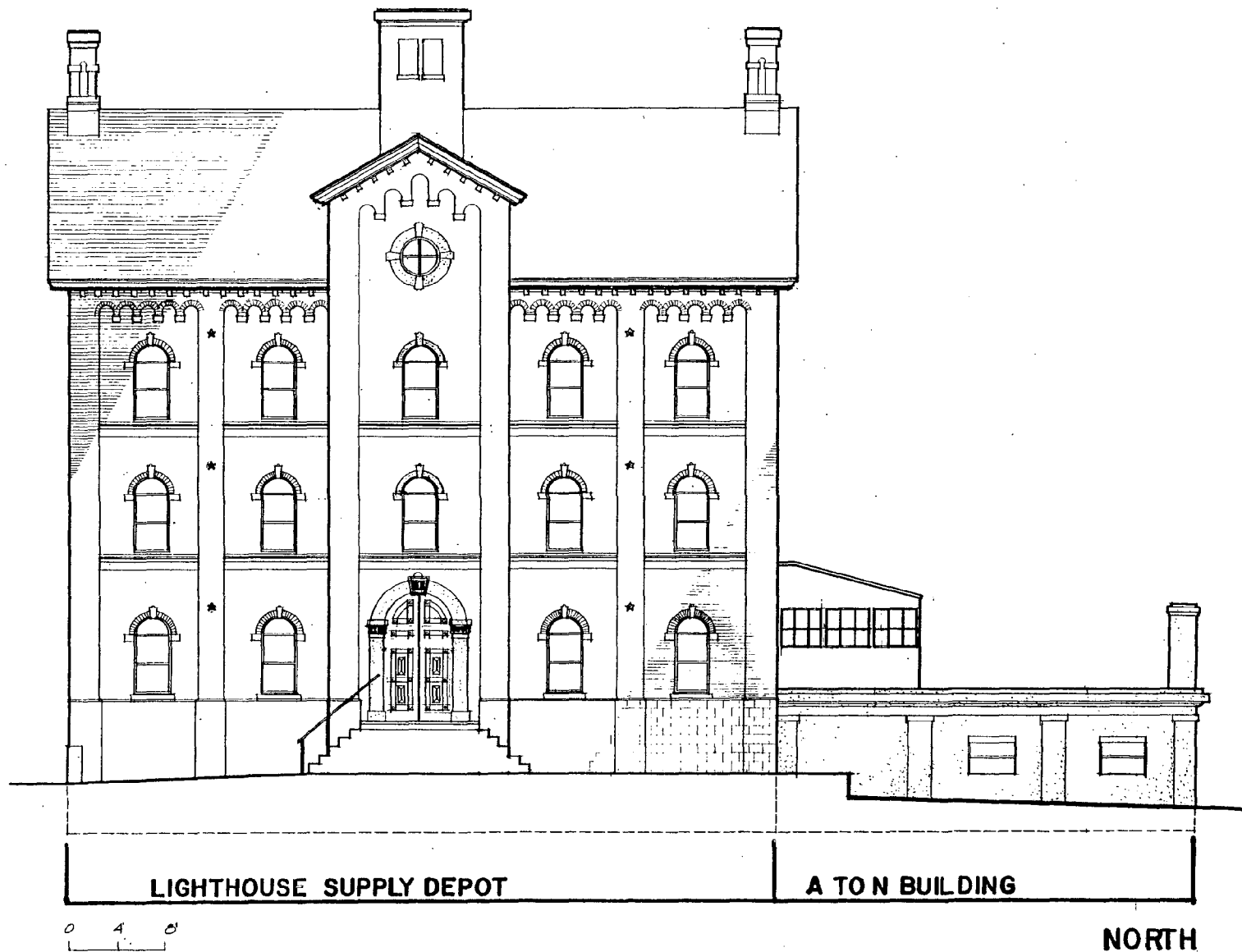
The building is one level with a two-story crane bay used for repairing buoys, adjoining the Lighthouse Depot west wall. The upper level of the crane bay is made of iron and wood with iron trusses. Metal windows forming a clearstory on three sides of the upper area.

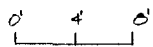
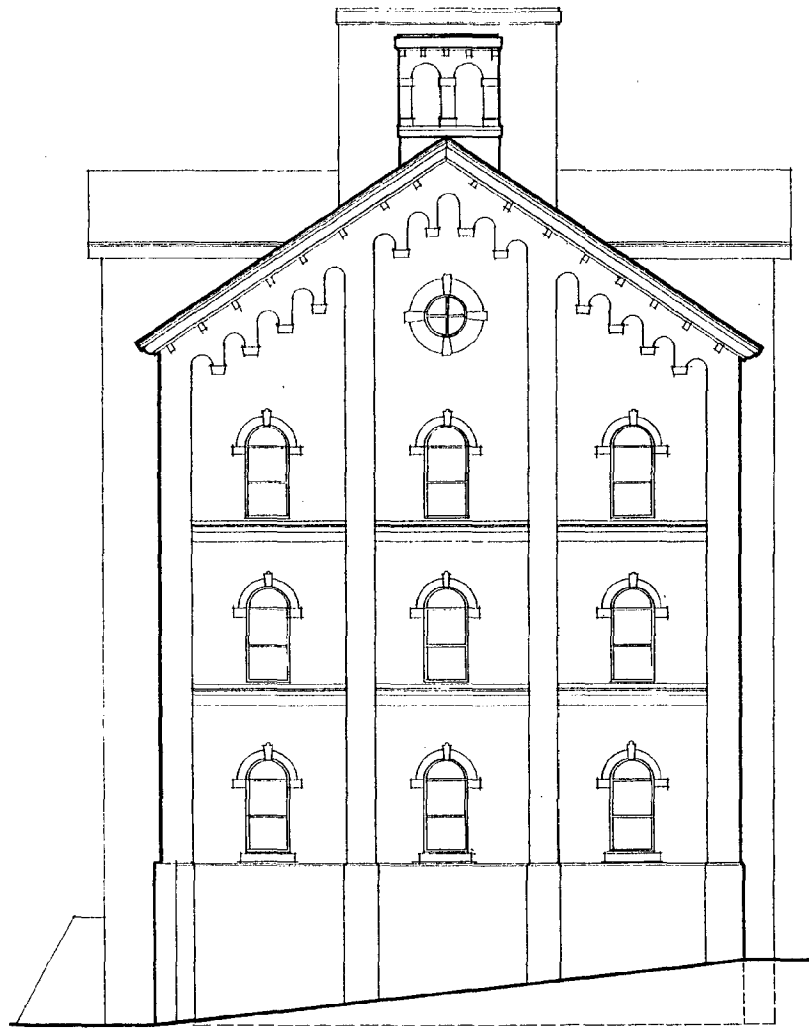
The exterior walls are poured-in-place, reinforced, plastered concrete. The roof structure is concrete on iron trusses. Entry is through a garage door or a steel pedestrian door, both of which are on the south side. There is a concrete chimney on the northwest corner.

There exists no plumbing in the building. Heat is provided by means of a gas space heater mounted on the ceiling.

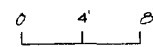
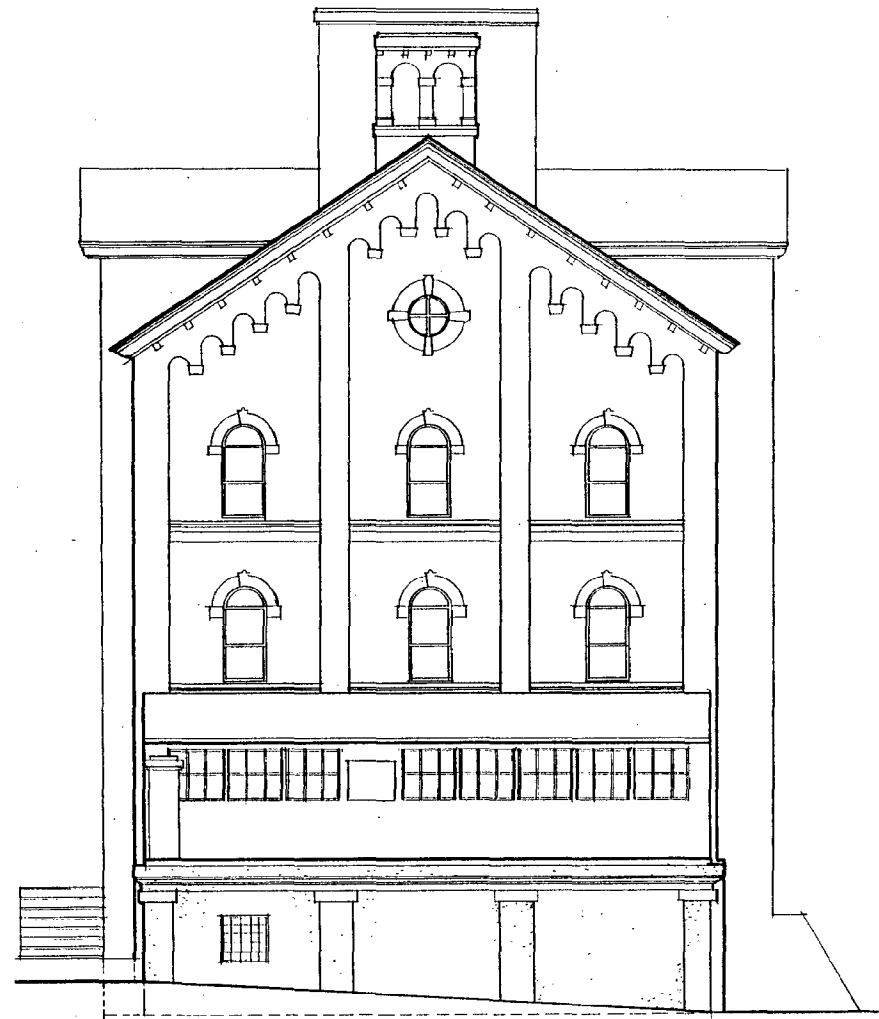
Measured drawings of the Lighthouse Depot and Supply Building and the Aids to Navigation Building follow.



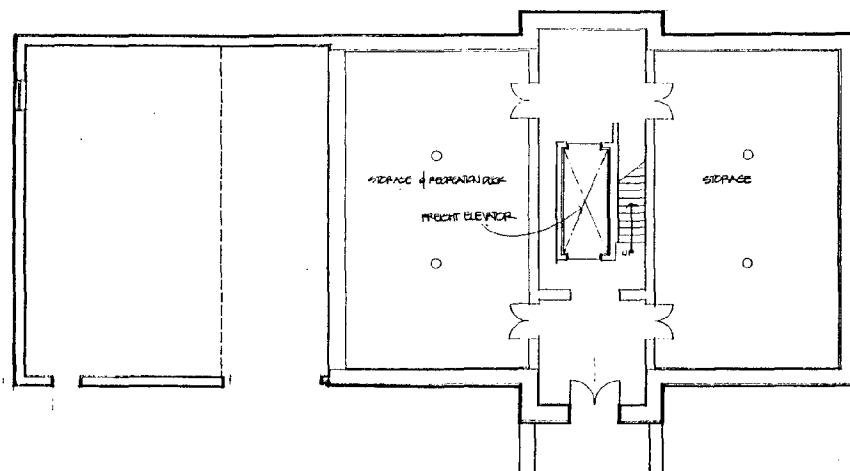




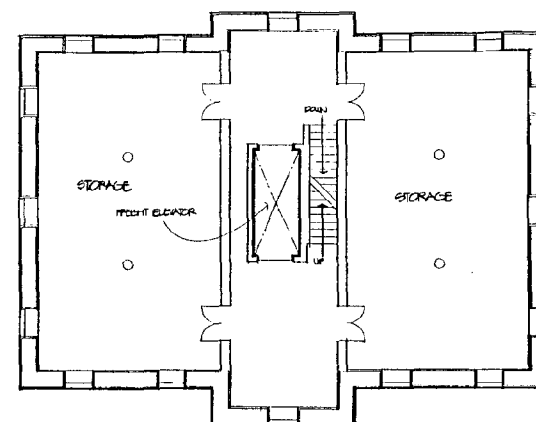
EAST



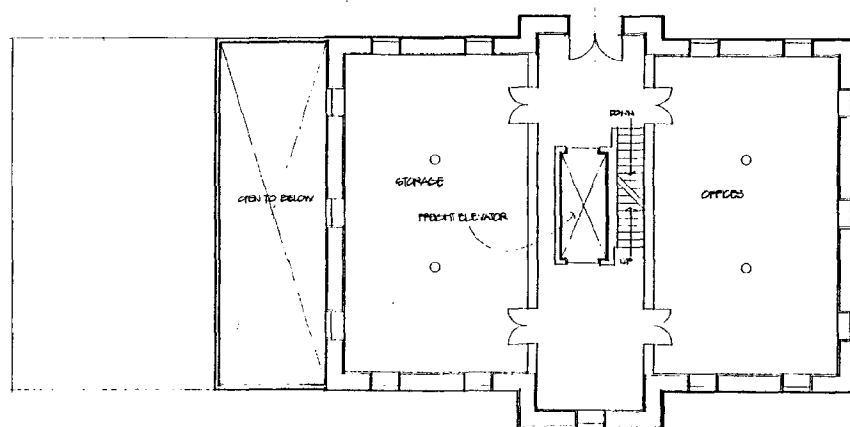
WEST



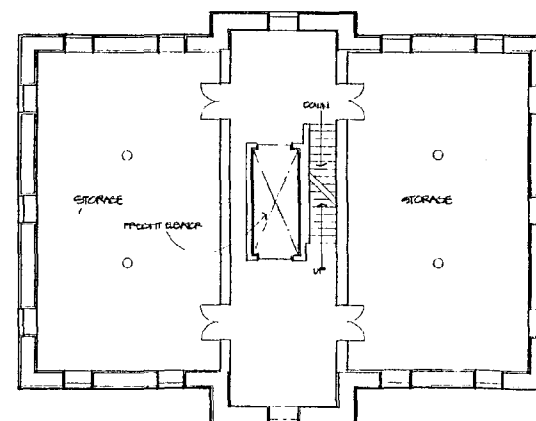
FIRST



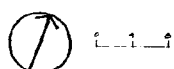
THIRD

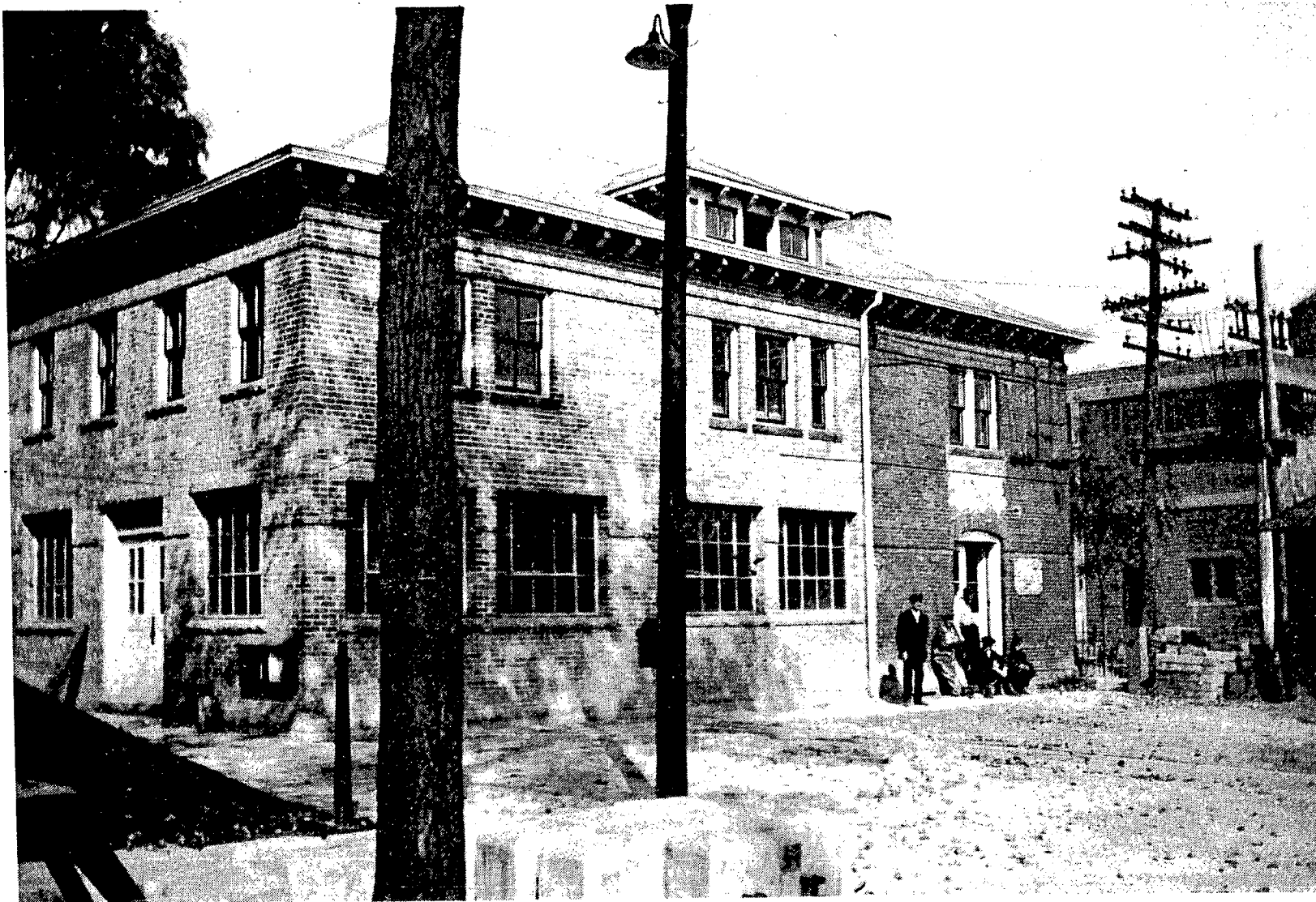


SECOND



FOURTH





This 1922 photo of the Engineering Service Activity building, prior to construction of the garage, clearly shows the two phases of construction. The darker section on the right was built in 1916 and the lighter section in 1920.

Engineering Service Activity Building

Year constructed: Phase One prior to 1916
Phase Two - 1920

Builder/Architect: Unknown

Materials: Foundation: Stone rubble
in mortar
Exterior Walls: Brick
Roof: Shingles on iron
beams and rafters
Gutters: Metal

Structure: Masonry bearing wall with
iron interior columns,
floor joists and roof
structure

Summary	Entrances				Area
	N	S	E	W	
Lower Level					480
Level 1		1		3	3066
Level 2					3066
Level 3 (attic)					<u>3066</u>
Total					9678

DESCRIPTION

The building was built in two phases, although this is not readily apparent. A vertical joist line exists in the middle of the exterior east and south walls corresponding to a masonry bearing wall that divides the building into two sections. The southeast

quarter of the building was constructed prior to 1916, with the northwest three quarters being completed in 1920. The building rests on a mortared rubble stone foundation with exterior brick bearing walls. Iron columns, beams, and joists support the floor. The roof structure is of wood and is of hip style with four projecting gables, one on each side. The roof overhands approximately 18" with decorative wood brackets and attached metal gutters. A brick cupola projects from the roof and houses the freight elevator equipment.

The windows are double-hung wood windows with stone sills. No storm windows exist. Some windows are bricked shut, some are glass blocked, and some are filled with air conditioners or ventilation fans. A chimney projects from the roof on the east facade.

Inside, the building is functional, bland, and lacks intriguing details. One stair exists to all levels and does not conform to current egress requirements. Heat for the building is provided by an old steam boiler in the lower level. Electric base board heat has been added in office spaces to supplement the steam heat. Plumbing facilities exist in this building.

Measured drawings of the ESA Building and the Exchange Building follow the written assessment of the Exchange Building.

Exchange Building

Year constructed: 1930

Builder/Architect: Unknown

Materials: Foundation: Not revealed
Exterior Walls: Brick
Roof: Flat, tar built-up roof, concrete planks on steelbeams and rafters
Gutters: Metal

Structure: Brick bearing wall support iron beams and rafters with a concrete deck system

Summary	Entrances				Area
	N	S	E	W	
Level 1		1		1	1099

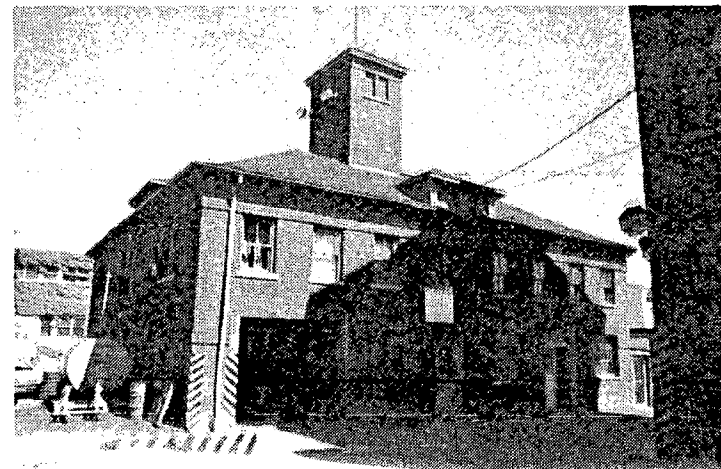
DESCRIPTION

The building was originally built as a 4-bay garage. Two bays were added to the west later with larger doors, but in the same nondescript style. The building has since been used as the base's recreation deck but currently is used as the base exchange. All garage doors are now windows with fencing in front of four.

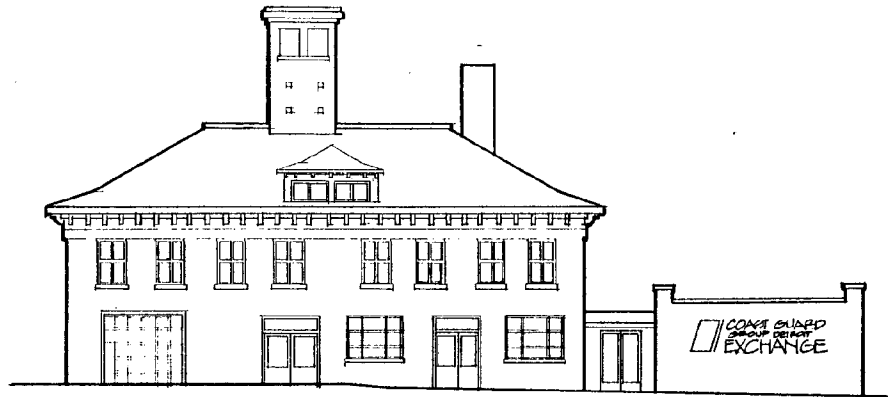
The building is painted white with the west wall advertising the exchange function of the building. The trim is painted black. A small skylighted addition acts as the main entrance and connects the building to the ESA Building.



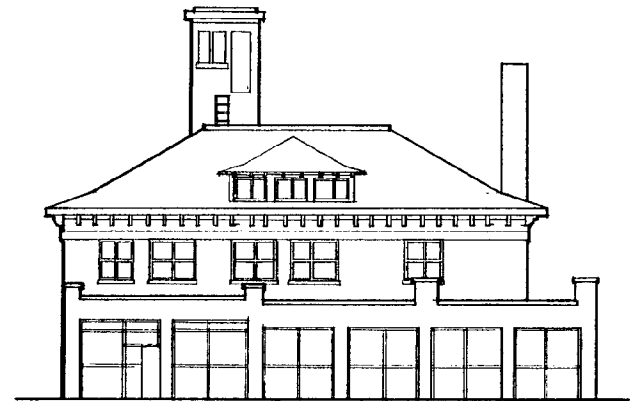
The Exchange Building from the southwest.



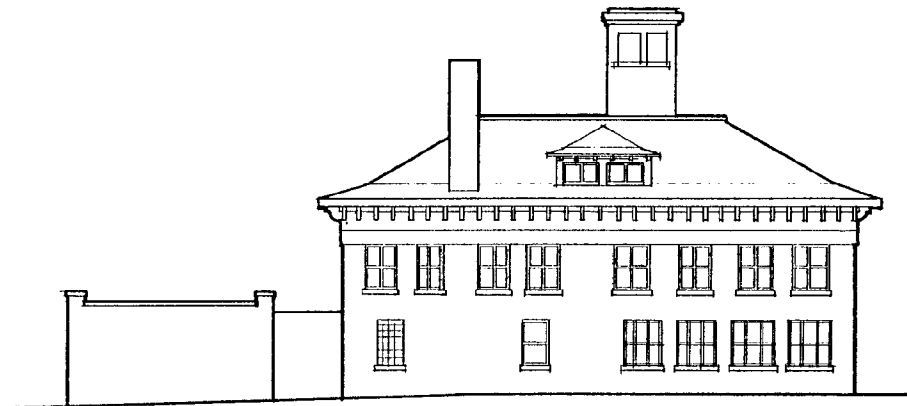
The Exchange Building from the northwest.



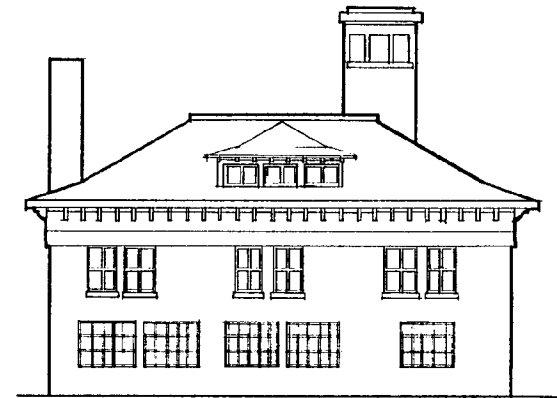
WEST ELEVATION



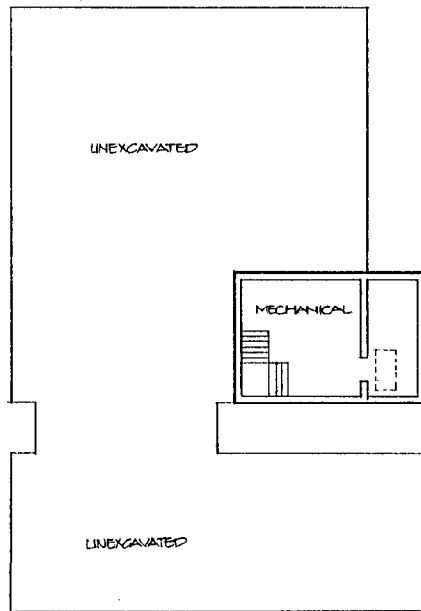
SOUTH ELEVATION



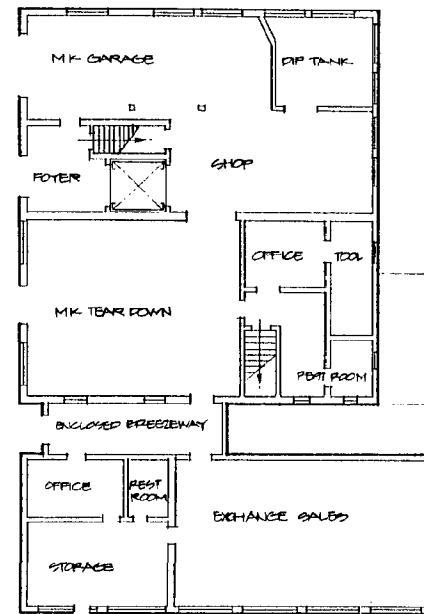
EAST ELEVATION



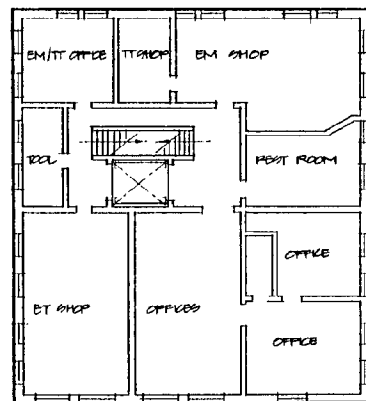
NORTH ELEVATION



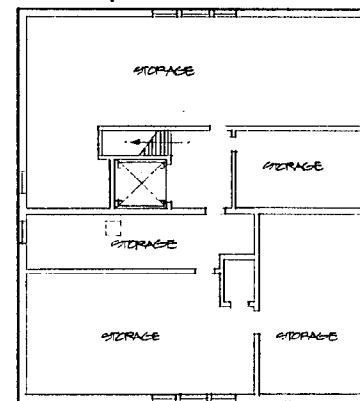
BELOW GRADE LEVEL



FIRST LEVEL



SECOND LEVEL



THIRD LEVEL

Existing Building Spatial Summary

The following shows the quantity of space currently available for each building by floor. While alterations or additions to the buildings would modify these figures, significant changes are not anticipated. The data presented forms a good basis for programming future space.

		<u>Circulation/Mechanical</u>		<u>Usable</u>		<u>Total</u>
		<u>S.F.</u>	<u>%</u>	<u>S.F.</u>	<u>%</u>	<u>S.F.</u>
Lighthouse Storage Depot						
Level	One	516	5	1476	15	1992
	Two	516	5	1476	15	1992
	Three	516	5	1476	15	1992
	Four	516	5	1476	15	1992
	Attic (Storage)	0	0	1992	20	1992
Total		2064	20	7896	80	9960
Engineering Service Activity						
Basement		480	5	0	0	480
Level	One	473	5	2593	25	3066
	Two	687	7	2379	29	3066
	Three	326	3	2790	26	3066
Total		1966	20	7712	80	9678
Aids to Navigation Building		0	0	1275	100	1275
Exchange Building		190	15	1100	85	1290
Grand Total		4220		17983		22203

INTERPRETIVE CENTER PROGRAM

In order to develop the Mt. Elliott Interpretive Center, specific themes were established that developed into a workable program. These themes were based on the following goals:

1. To relate information of significant interest to large numbers of people.
2. This information should be educational as well as interesting and should be in a flexible format.
3. It should be based on elements of life in the Detroit area (history, industry, the riverfront, fitness).
4. It should not duplicate information provided at other museums or centers, but should act as a source of supplemental information.

With these goals in mind, a test of potential user interest in the Interpretive Center began consisting of individual meetings, letters, and contacts with various groups and organizations, culminating in a mini-conference.

This Linked Riverfront Parks Mini-Conference was held on April 23, 1981, for the purpose of providing information to a selected group of interested parties, gathering suggestions and generating interest in participation. The topics of the Mini-Conference were:

1. An update on the Linked Riverfront Parks Project.

2. Presentation of plans for implementation of a holiday and weekend bicycle/pedestrian route between the Renaissance Center and Belle Isle (since completed under a separate contract).
3. Presentation of plans to adapt the historic Coast Guard Lighthouse Depot into an Interpretive Center and Museum.

Of the 60 organizations invited, 41 attended, including governmental agencies, educational institutions, local businesses, the United States Coast Guard, the United States Department of Naturalization & Immigration, the Dossin Great Lakes Museum, Department of Natural Resources, Detroit Neurosurgical Foundation, and other professional and civic organizations. A questionnaire was distributed to gather suggestions and to obtain an indication of interest in the projects. Of the 27 forms filled in, 22 indicated a willingness to participate in the Interpretive Center. The questionnaire tested interest in using the building in three ways (using exhibit space, meeting space, and office space). A total of 21 organizations noted they would like to participate through exhibition. Of these, eight groups were willing to erect permanent exhibits and 13 groups to participate on a rotating basis. Twelve groups indicated they would have a need for meeting space. Seven groups would need office space, with only one willing to use the space if rent was charged. Other uses suggested for the Interpretive Center included a location for student field work and internship placement offices for Wayne State University, a visitor information center, and a location for guest lectures.

Armed with data collected from the Mini-Conference, individual meetings and letters of interest, a preliminary program was developed. This program was applied to the existing space which determined the following program.

Lighthouse Supply Depot Program

From the outset it was assumed that the Lighthouse Supply Depot Building would be the focus of the Interpretive Center. Functions in this building include exhibition, meeting, office, and support facilities.

Two types of exhibition space are provided, permanent and rotating. The permanent exhibit could be a display by the U. S. Coast Guard, describing their unique history and displaying uniforms, charts, buoy and other Great Lakes nautical information. Other permanent displays could perhaps include an exhibit sponsored by the Immigration Department on the influx of immigrants from around the world and what areas of Detroit they settled in. Displays could be fabricated that relate to health and physical fitness, energy, or general Great Lakes information.

The rotating exhibits could include information specific to a particular incident, such as boat races or winter activities. To oversee and organize the exhibition spaces, a curator will be required, perhaps with a small staff (see "Operations"). An office is provided to accommodate these people.

The conference/meeting room is recommended as a place for presentations, lectures, conferences, seminars, or informal gatherings.

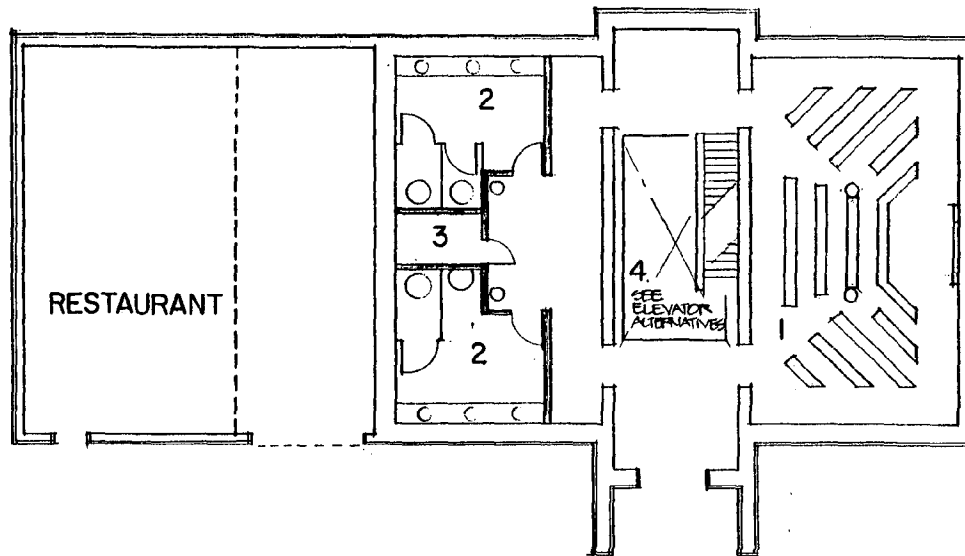
Organizations and businesses could reserve the use of this room on either a fee or non-fee basis.

A lecture/audio visual room is provided for slide shows or movie projection of various interpretive topics. Permanent shows could be running at all times for viewing by visitors to the Center. Special shows could be arranged by reservation or by request covering a variety of topics of special interest.

Restrooms provided on the lower level are designed for use by visitors of the Interpretive Center and are not sized to accommodate the traffic of the entire park. Staff restrooms are provided in the E.S.A. building program, and park user comfort facilities are provided in the conversion of the concrete block building in the Mt. Elliott Park.

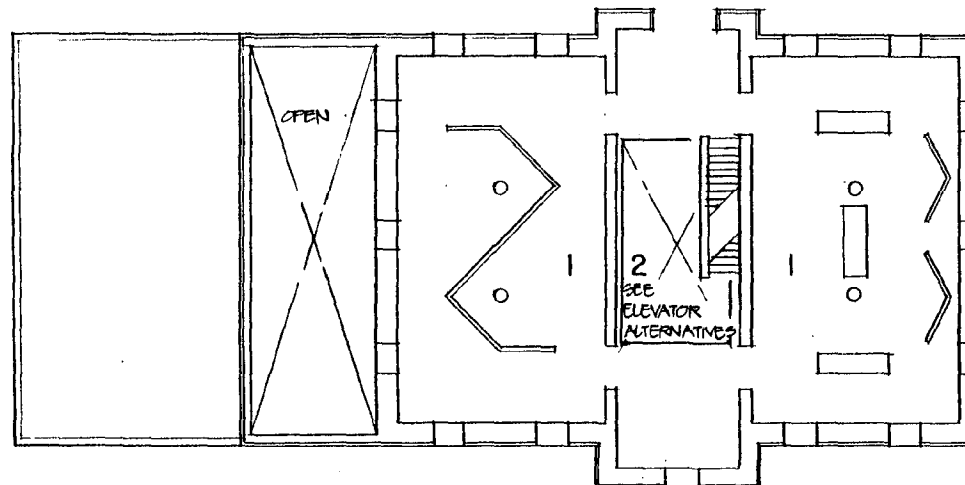
Storage is provided in the attic space. This space is not intended to be open to the public.

The following outline program delineates the spatial requirements of these functions:



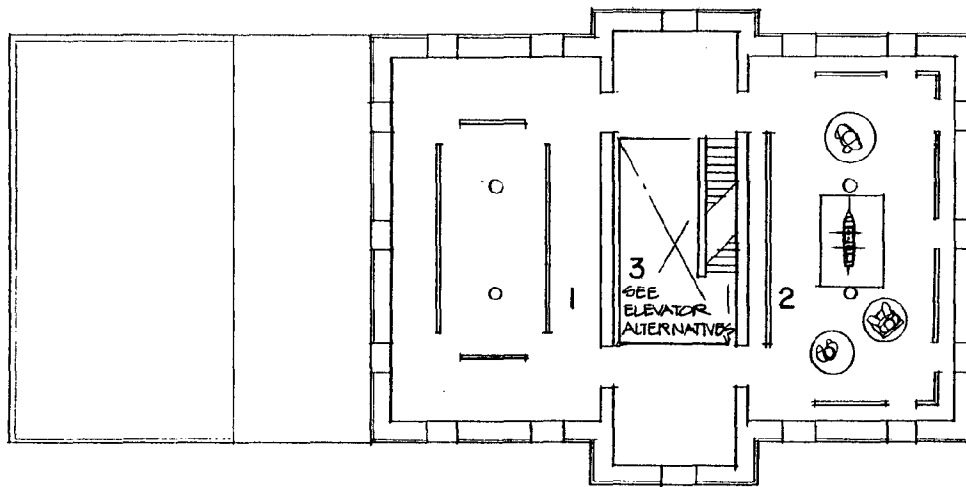
- 1 LECTURE / PROJECTION
- 2 REST ROOMS
- 3 MECHANICAL
- 4 ELEVATOR

FIRST LEVEL



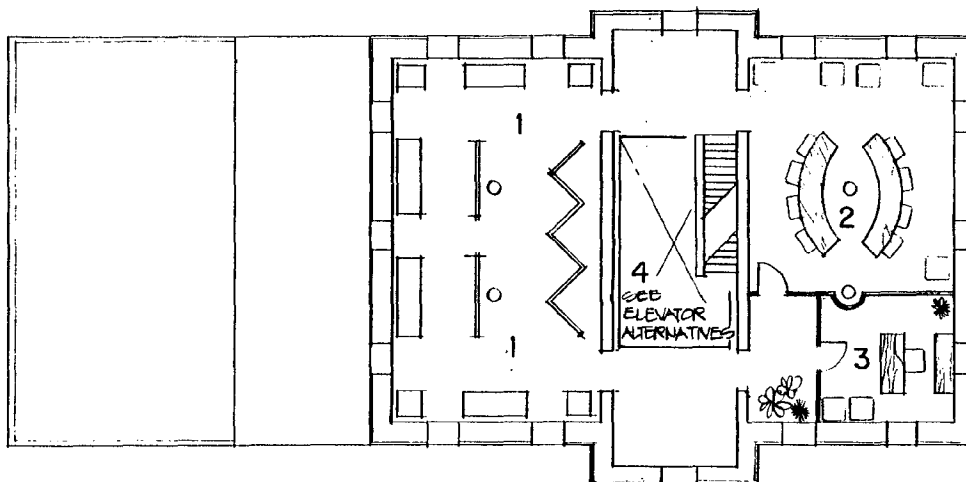
- 1 ROTATING EXHIBIT
- 2 ELEVATOR

SECOND LEVEL



- 1 ROTATING EXHIBIT
- 2 PERMANENT EXHIBIT
- 3 ELEVATOR

THIRD LEVEL



- 1 PERMANENT EXHIBIT
- 2 CONFERENCE
- 3 OFFICE
- 4 ELEVATOR

FOURTH LEVEL

Function	Level	1	2	3	4	5	Total
Permanent Exhibition				738	738		1476
Rotating Exhibition			1476	738			2214
Conferences/ Meetings					583		538
Curator's Office					200		200
Lecture/ A/V		738					738
Restrooms/ Mech.		738					738
Storage						1632	1632
Elevator		60	60	60	60	60	300
Circulation/ Structure		456	456	456	456	300	2124
TOTAL		1992	1992	1992	1992	1992	9960

Elevator Alternatives

The proposed change of the Lighthouse Supply Depot Building from use as a storage facility to use as a display and public meeting place changes the building to an A3 use group. Two fire rated, 44" wide, stairs independently enclosed are necessary to meet egress requirements. Only one 36" wide stair with no separation between floor areas presently exists. To accommodate handicapped and elderly, an elevator must be provided. Four alternatives demonstrating how this can be achieved are:

Alternative A

This is the recommended approach. All stairs and the elevator fit within a central core and do not effect the exterior of the building or the brick arched doors on each level. It does, however, entail the removal of the existing stone stair. Replacing these stairs are two new independent fire rated 44" wide stairs in a wrapped scissor configuration. Fire doors are accommodated on landings and need not be added to the existing brick arched doors. The elevator fits in the remaining space.

In preliminary discussions with representatives of the City of Detroit's Building Safety and Engineering Department and Historical Designation Advisory Board, this alternative was preferred since it meets (at this initial level) safety and egress requirements and, historically, impacts the structure the least.

Alternative B

The existing stair is maintained with a new 44" wide stair added adjacent to it but running in the opposite direction, forming a scissor type configuration. Fire doors are added to the arched doors leading into the two bays on each floor. This negatively impacts the historic nature of the doors by greatly changing their appearance. The elevator is added outside the building between the Supply building and the E.S.A. building in a tower connected at each level to the Supply building. A bridge connects the elevator to the E.S.A. building at the second level, providing for barrier-free access to both buildings.

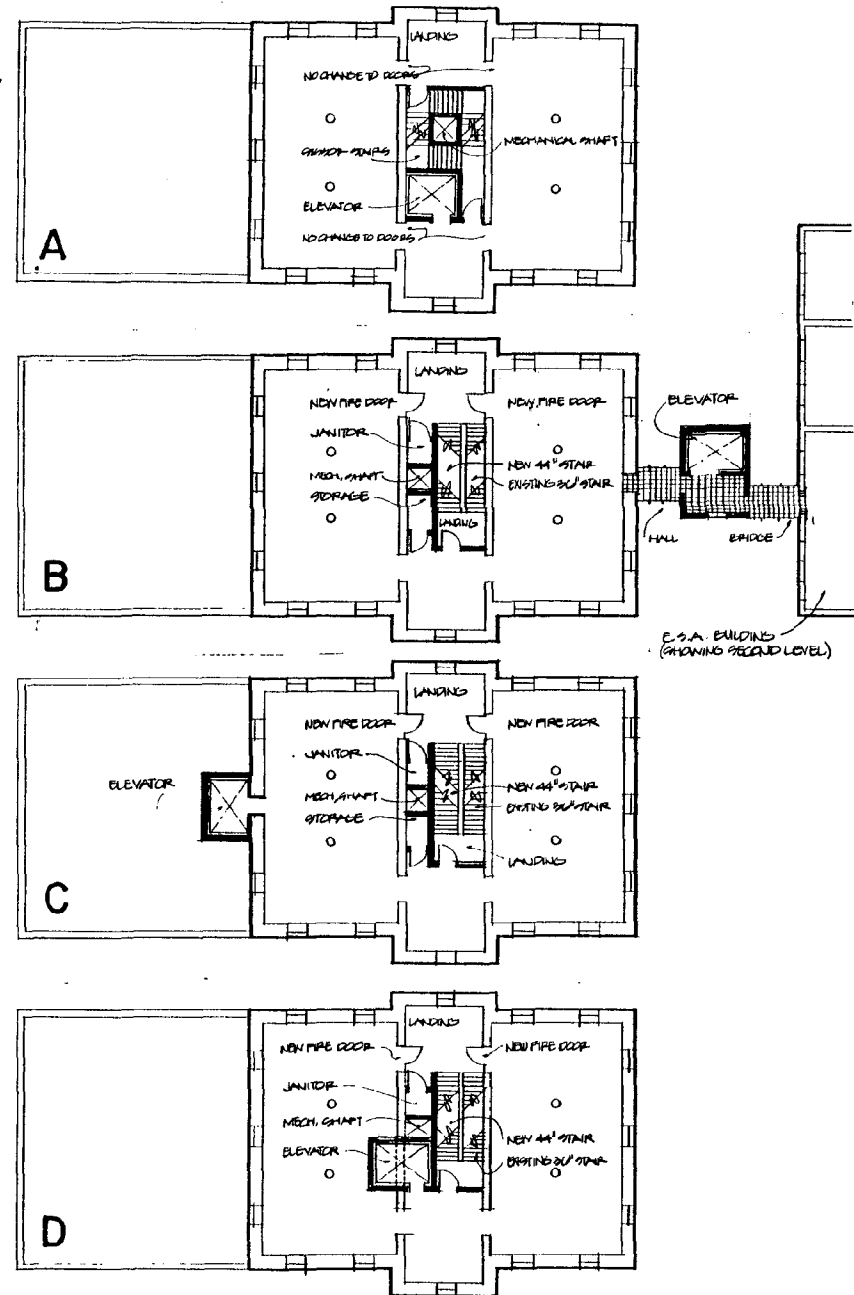
This alternative is not recommended since the ensuing visual impacts both inside and out would not be acceptable.

Alternative C

This alternative has the same stair configuration as Alternative "B". The elevator, however, is added to the west side of the building. This location is less apparent and there is not as much construction as in Alternative "A". However, it is still undesirable due to the exterior and interior impacts.

Alternative D

This alternative has the same scissor stair configuration as Alternatives "B" & "C" except that the elevator is inserted adjacent to the stair. Although this is more desirable than either "B" or "C", the impact of the elevator and the addition of the fire doors to the existing brick arched doors would be undesirable.

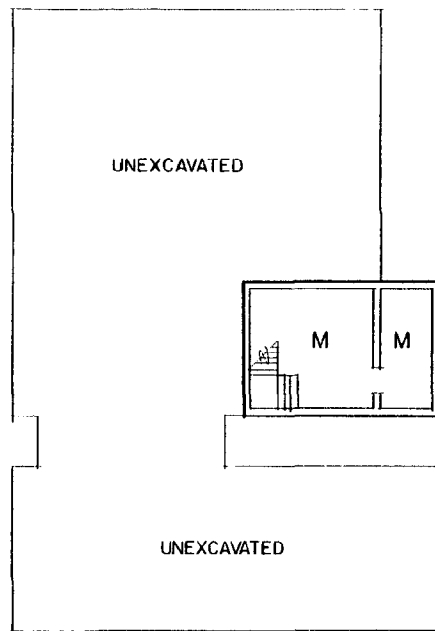


Engineering Services Activity Building
Program

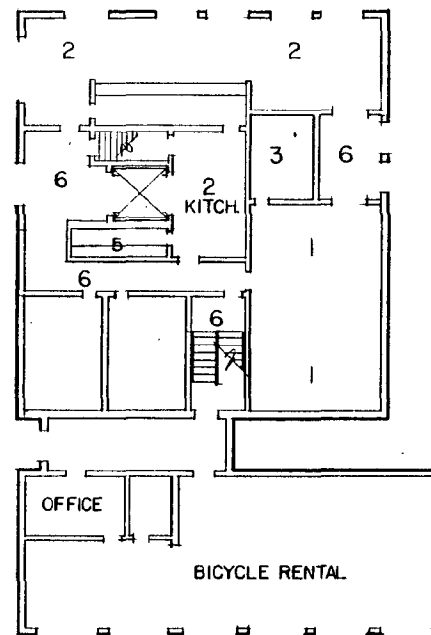
The E.S.A. Building is the second most dominant building in the Interpretive Center Complex. It is programmed to accommodate concession and office functions due to its location in relationship to all other functions. This proximity allows for easy access by Park and Interpretive Center users, as well as surveillance of the grounds and buildings.

The following program outline was arrived at based on the projected needs of the park and Interpretive Center users and fits within the context of active spaces delineated in the proposed land use configuration.

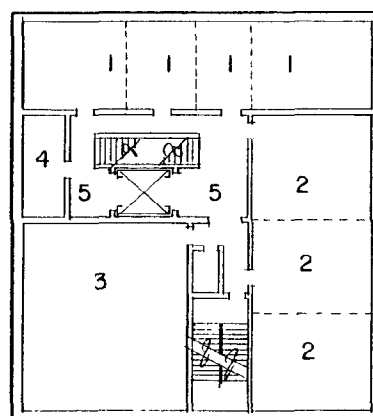
Function	Base- ment	1	2	3	Total
Bait & Tackle					
Concession		720			720
Bait & Tackle					
Office		100			100
Food Concession		816			816
Kitchen		360			360
Park Office			725		725
Rented Office			755		755
Meeting Room			675		675
Restrooms		450			450
Mechanical	480				480
Circulation		500	679	500	1679
Elevator					
(freight)		120	120	120	360
Storage			112	2446	2558
Total	480	3066	3066	3066	9678



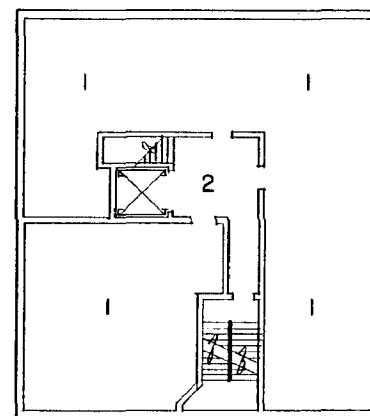
M MECHANICAL
BELOW GRADE LEVEL



1 BAIT &
TACKLE CONCESSION
2 FOOD CONCESSION
3 CONCESSION OFFICE
4 REST ROOM
5 STORAGE
6 CIRCULATION
FIRST LEVEL



1 PARK OFFICE
2 OFFICE
3 MEETING ROOM
4 STORAGE
5 CIRCULATION
SECOND LEVEL



1 STORAGE
2 CIRCULATION
THIRD LEVEL

Aids to Navigation Building Program

The Aids to Navigation Building, attached to the Lighthouse Supply Depot, is proposed to be leased from the City as a restaurant by a private enterprise. This use is considered due to the building's size, the existing two-story crane area, and the potential of additional restaurant seating space on the roof as an open air cafe or a glass enclosed dining room. The views are ideal from this vantage point as it overlooks Coast Guard operations, the Detroit River, Belle Isle and the proposed plaza. A restaurant developed in this area is seen as an opportunity to serve the proposed housing and the influx of visitors to the Park and Interpretive Center. No restaurant currently exists in the East Riverfront area east of Jos. Campau.

This, however, is seen as a long-range action since no restaurateurs have been approached or have expressed interest. In the short range, it could remain in use by the Coast Guard or as storage space.

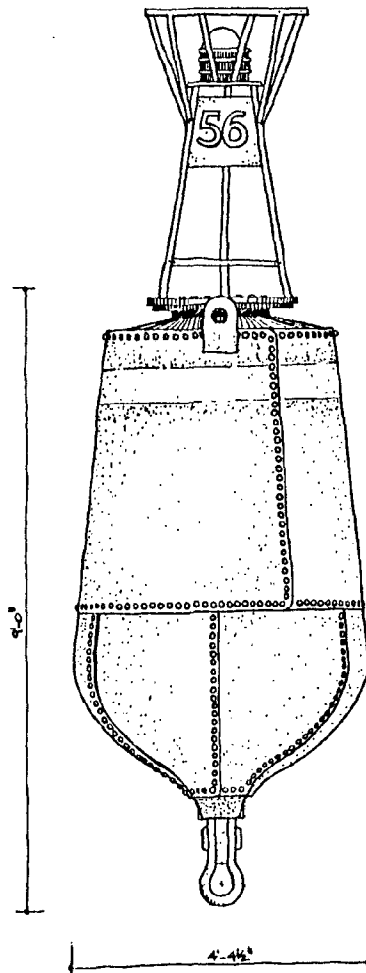
Function	Level 1	Level 2 (roof)	Total
Leasable space	1275		1275
Roof area (expansion)		825	825
Total			2100

Exchange Building Program

The Exchange Building is programmed as a single use building for the rental of bicycles. The building was originally a six-bay garage and if the garage doors were re-opened and fenced, it would become ideal for a well-supervised rental structure. It is planned to work in conjunction with the bike route currently being implemented in this area. Since the bicycle route is currently only for holidays and weekend use, the rental station is seen as a future development. Initially the building may be used for storage or retained by the Coast Guard.

Function	Area
Bike Storage	950
Rental Office	150
Total	1100

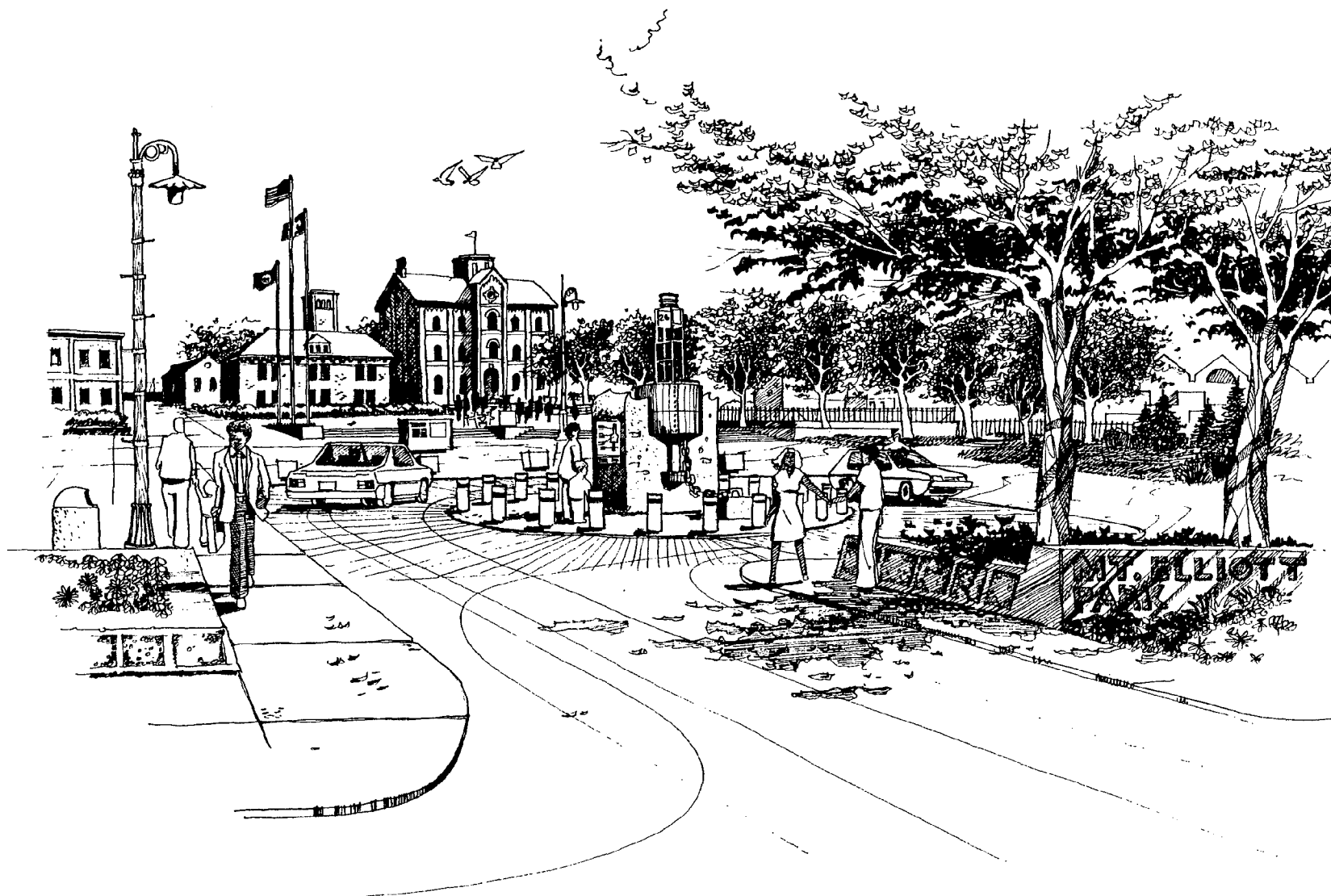
INTERPRETIVE BOUY



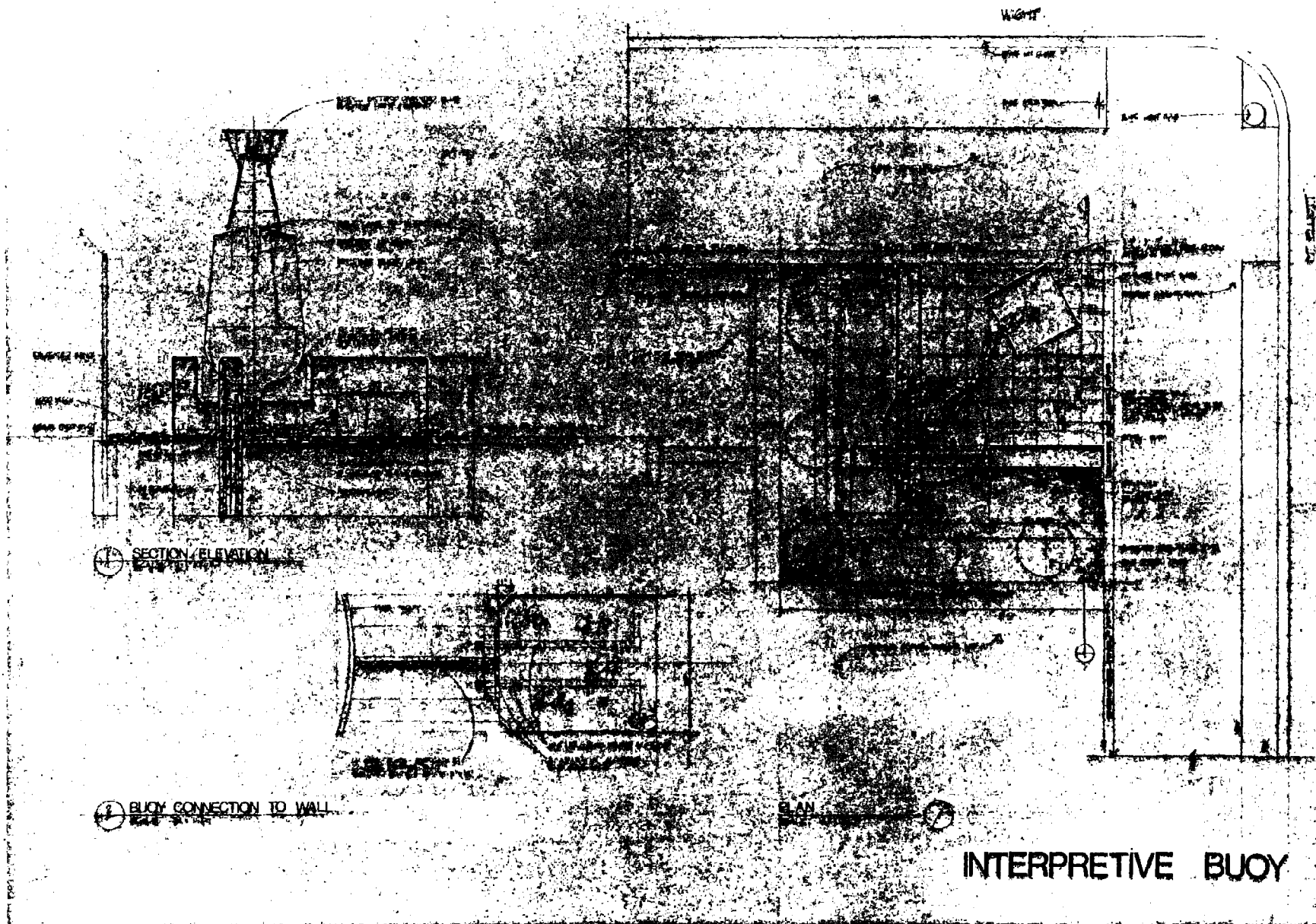
The intent of this project was not only to be a planning document, but to begin implementation of the overall project in some way. Working with the interpretive theme of the center and park, the proposed site plan for the entrance plaza, and current land uses, a monument to Great Lakes history was conceived. The location is the southwest corner of Mt. Elliott and Wight Streets on the edge of the Coast Guard parking lot. This location will fall in the center of the proposed entrance plaza circular drive.

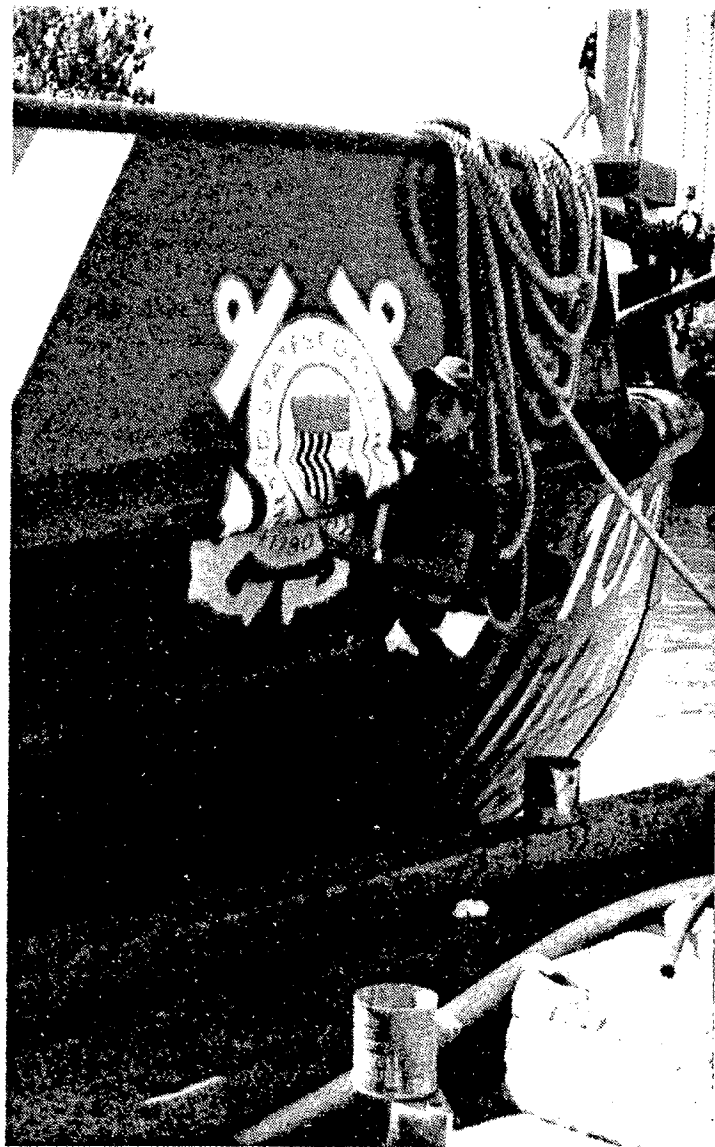
The Coast Guard has designated for donation an obsolete, riveted, Great Lakes buoy. This buoy, circa 1900, was a marker buoy that simply protruded from the water. Similar buoys were fitted with a light, bell, or gong cages, and were anchored as navigation devices. Buoys similar to that donated are still used, but have welded seams, and often vary in shape.

The buoy is proposed to be lifted by the Coast Guard onto a simple foundation constructed by the City of Detroit, Recreation Department. It will be fitted with an anchor and light cage. This light cage will hold a battery-operated, flashing blue light. The foundation will bear graphics that relate information about buoys, navigation, and the Coast Guard.



The placement of the Interpretive Buoy will be in the drop-off circle, which is currently the south-west corner of Mt. Elliot & Wight Streets on the existing Coast Guard parking lot.





IMPLEMENTATION

The implementation strategy for the adaptive reuse of the Coast Guard Station and the construction of Mt. Elliott Park involves a close coordination of public improvements with private development on adjacent parcels. This is due to the fact that the proposed public improvements, such as the Mt. Elliott Entry Plaza or the parking structure, will directly enhance public/private development. The coordination of phasing and funding is crucial to the total development of the area.

This chapter involves four major considerations:

1. A detailed construction estimate of the three Land Use and Circulation Alternatives which facilitates evaluation of public sector development in a total development package for this area.
2. The recommended site plan is broken down into implementation phases along with an estimated cost of construction for each phase. Special attention is given to actions that could be undertaken immediately with minimal cost to help stimulate further development.
3. Sources of funding for the various developments are reviewed in light of the current changes, adjustments, and the elimination or curtailing of certain funding sources.

4. Costs of operating and maintaining the Interpretive Center are presented since developmental costs do not alone fully represent the total cost of the Center.

CONSTRUCTION ESTIMATES

Construction estimates are presented for each of the three Land Use Alternatives. Each Alternative is divided into four development zones.

A. Mt. Elliott Entry

This zone includes the mini-park at the intersection of Jefferson and Mt. Elliott, and improvements along Mt. Elliott Street to Wight Street.

B. Entry Plaza

This is the central plaza of the Mt. Elliott development node and is a large public space for use by those visiting the Interpretive Center, the Mt. Elliott Park, and as an entrance plaza to proposed housing and commercial development at the American Natural Resources and the City-owned Uniroyal parcels.

C. Mt. Elliott Park

This zone includes park improvements extending from the river to Wight Street and from Mt. Elliott Street to the Uniroyal site.

D. Interpretive Center

This zone includes the buildings and immediate land proposed for development as the Interpretive Center.

All estimates assume the following:

- . That all land necessary for development is already acquired, proposed to be acquired through land trades, or is to be purchased prior to development, and that no additional land acquisition costs will be incurred.
- . Development costs of the Mt. Elliott Park extension onto the City of Detroit Uniroyal Parcel presumes the land is cleared of paving, structures and debris.
- . That preliminary construction estimates were prepared as of 1981 and escalation factors must be applied to phased construction.

Alternative One Cost Estimate

A. Mt. Elliott Entry Improvements

1. Site Preparation -

- (a) Demolition of:
- | | | |
|----------------------|---------|------|
| - walks where needed | 5500 sf | 3000 |
| - vegetation removal | 1s | 2000 |

- (b) Fill & Contouring
- | | | |
|------------------------------|--------|------|
| - berm at entry of Jefferson | 200 cy | 1000 |
|------------------------------|--------|------|

Site Preparation Sub-Total \$ 6,000

2. Site Drainage and Utilities

- (a) Drainage
- | | | |
|-----------------------------|--------|------|
| - catch basins (renovation) | 1s | 3000 |
| - catch basins (new) | 1s | 2000 |
| - drainage piping | 100 lf | 4000 |

- (b) Utilities
- | | | |
|--------------------------------|---------|-------|
| - <u>Electric</u> | | |
| - bury electric & phone wires | 1100 ft | 55000 |
| - street lighting (150' oc) | 7 | 14000 |
| - minipark lights at Jefferson | 4 | 4000 |
| - misc. light | 1s | 2000 |

- | | | |
|---------------------|--------|------|
| - <u>Water</u> | | |
| - drinking fountain | 1 | 1500 |
| - hose bibs | 2 | 700 |
| - piping | 150 lf | 3000 |

- | | | |
|---------------------|----|------|
| - Irrigation System | 1s | 6000 |
|---------------------|----|------|

Site Draining and Utilities Sub-Total \$95,200

3. Structures

- (a) Bus shelter at Jefferson 1 15000
- (b) 300 car, 3-level parking deck 900,000 sf 900000
- (c) Pedestrian bridge to warehouse conversion 1s 15000

Structures Sub-Total \$930,000

4. Site Improvements

- (a) Grading topsoil hydro-seed 5000 sf 7500

- (b) Concrete planter, walls 1s 5000

- (c) Paving
- | | | |
|-------------------------------|----------|-------|
| - walks | 9000 sf | 27000 |
| - bike path | 5000 sf | 5000 |
| - road re-surfacing (asphalt) | 21000 sf | 21000 |

- (d) Site furnishings
- | | | |
|---------------------------|----|-------|
| - entry sign at Jefferson | 1s | 5000 |
| - bollards | 50 | 30000 |
| - benches | 10 | 6000 |
| - waste receptacles | 10 | 3000 |
| - signage | 1s | 1500 |

- (e) Landscaping
- | | | |
|--------------------|----|-------|
| - evergreen trees | 15 | 4500 |
| - deciduous trees | 30 | 12000 |
| - ornamental trees | 5 | 1000 |
| - shrubs | 20 | 1000 |

Site Improvements Sub-Total \$129,500

B. Entry Plaza

1. Site Preparation

(a) Demolition of:

- rail tracks along Wight Street	200	lf	3000
- Wight Street	6000	sf	5000
- fences	80	lf	1600
- walls/retaining		ls	4000
- scrub growth		ls	1500
- misc., oil tanks, debris		ls	1500
- remove paving/parking lot	55000	sf	24000

(b) Fill & Contouring

- berm at west edge	200	cy	1000
---------------------	-----	----	------

Site Preparation Sub-Total \$31,600

2. Site Draining & Utilities

(a) Drainage

- catch basins	2		4000
- piping	300	lf	7500

(b) Utilities

- <u>Electric</u>			
- pedestrian lighting	8		12000
- drop-off lighting	4		6000
- misc. spots & signs		ls	5000
- <u>Water</u>			
- hose bibs	2		700
- piping	350	lf	7000
- drinking fountain	1		1500
- Irrigation System		ls	4000

Site Draining & Utilities

Sub-Total \$47,700

3. Structures

- bus shelter	1		15000
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4. Site Improvements

(a) Grading, topsoil, hydroseed

300	sy	450
-----	----	-----

(b) Paving

- plaza special paving	12000	sf	144000
- vehicular drop-off	10000	sf	50000
- walks	2000	sf	6000
- bike path	1500	sf	1500
- Wight Street	7500	sf	75000

(c) Site Furnishings

- seating	15		9000
- waste receptacles	10		3000
- signage		ls	2000
- amphitheater	2500	sf	40000
- bollards	50		30000
- entry sign - Mt. Elliott Park		ls	5000

(d) Landscaping

- deciduous trees	10		4000
- ornamental trees	5		1000
- shrubs	20		1000

Site Improvements Sub-Total \$371,950

C. Mt. Elliott Park Improvements

1. Site Preparation

(a) Demolition of:

- concrete block bldg. on east (two levels)	20000	sf	100000
- partial Re-Steel building	21000	sf	105000
- strip site of paving/gravel	340000	sf	75000
- fencing	2000	lf	4000
- scrub growth		ls	5000
- misc. poles, walls, bumbers, debris		ls	10000
- Mt. Elliott Street south of Wight	20000	sf	8800

(b) Fill and Contouring

- view hill	80000	cy	320000
- contoured seating		ls	10000
- berms	1500	cy	6000
- topsoil	1300	cy	13000

Site Preparation Total \$656,800

2. Site Draining and Utilities

(a) Drainage

- catch basins	6		12000
- piping	2000	lf	50000
- misc. drains (sea-wall, trenches, etc.)		ls	5000

(b) Utilities

- Electric lighting	4		8000
- pedestrian lighting	50		75000
- misc. lighting (bollards, step, sign)		ls	10000

(b) Utilities (cont.)

- Water piping	2000	lf	40000
- drinking fountain	2		3000
- hose bibs			
- Irrigation System			90000

Site Draining & Utilities Total \$293,000

3. Structures

(a) Re-Steel Renovation

- repair structure		ls	15000
- translucent fiberglass roof	21000	sf	105000
- electric		ls	63000
- paint		ls	30000

(b) Service Building

- storage facilities	6000	sf	150000
- restrooms	1000	sf	20000
- concessions	8000	sf	200000
- offices	4000	sf	40000
- garage	1000	sf	5000

Structures Total \$628,000

4. Site Improvements

(a) Grading topsoil

85000	sf	127500
-------	----	--------

(b) Paving

- concrete walks	17000	sf	51000
- promenade	30000	sf	90000
- plaza special paving/seating/play area	28000	sf	336000

(b) Paving (cont.)

- bike path asphalt (not inc. agility course)	7500	sf	7500
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(c) Site Furnishings

Marine Interpretive			
- Michigan relief	22500	sf	337500
- seven signs	7		7000
- course marking	1500	lf	7500

Jogging Course			
10 stations		ls	4000

Bicycle Agility Course		ls	9000
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Nautical Monument		ls	15000
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Children's Physical Fitness Play Area		ls	7000
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Seating	50		30000
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Waste receptacles	30		9000
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Signage		ls	1500
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Game Tables	5		1000
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View Scopes	3		600
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(d) Landscaping

- evergreen trees	80		24000
- deciduous trees	100		40000
- ornamental trees	20		4000
- shrubs	150		7500

Site Improvement Total			\$1,116,600
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5. Seawall - Fishing Bulkhead

(a) Existing sheet pile - handrail safety ladder	1100	ft	44000
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(b) New sheet pile (curved design)			
- sheet pile/tie backs/ drainage	500	ft	500000
- concrete cap	500	ft	115000
- backfill	7000	cy	35000
- handrail/safety ladder/handi- capped fishing	500	ft	20000

(c) Drainage structures Headwall at Mt. Elliott		ls	50000
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Total Seawall & Fishing Bulkhead			\$764,000
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D. Interpretive Center

I. Site Preparation

(a) Demolition of:

- misc. retaining walls, oil tanks, debris, etc.	1s	6000
- paving around bldgs.	15000 sf	65000

(b) Fill & Contouring

- berm at west edge	200 cy	1000
- berm around south side of Supply Bldg.	200 cy	1000

Site Preparation Sub-Total \$73,000

2. Site Draining and Utilities

(a) Draining

- catch basin	1	2000
- piping/connections	150 lf	3600

(b) Utilities

- <u>Electric</u> service	1s	2000
- pedestrian lighting	4	8000
- flood lighting	4	8000
- spots & signs	1s	5000
- Water service	150 lf	2000
- Gas service	150 lf	1000
- Phone service	150 lf	1000
- Irrigation system	1s	2000

Site Draining and Utilities Sub-Total \$34,600

3. Structures

Coast guard Conversion Construction Estimate

(a) Interpretive Center (Supply Building)

Exterior

- strip paint	1500 sf	750
- tuck point & clean brick	1s	4000
- repair and paint windows	60 ea.	2000
- remove elevator tower	1s	1900
- repair slate roof & patch elevator hole	1s	5000
- remove lights, basket-ball, signs, etc.	1s	500
- waterproof where replaced berm is	700 sf	350
- paint all trim (except copper)	1s	1500

Internal

- remove freight elevator	1s	5000
- remove stairs	1s	500
- remove partitions & drop ceilings	1500 sf	1500
- paint all metal and wood surfaces	1s	3000
- clean all brick surfaces	4000 sf	2000
- elevator	1s	50000
- gas hot water base heat	1s	40000
- new electric service	1s	24000
- new scissor fire stairs	140 steps	7000
- insulation in attic	3000 sf	2000
- plumbing to first level	1s	7000

(a) Interpretive Center (cont.)

First Level

- restrooms	738	sf	10000
- lecture room	738	sf	6000
- corridors	516	sf	1500

Second & Third Level

- corridors	1032	sf	2000
- display areas	2952	sf	10000

Fourth Level

- conference room	538	sf	2500
- office space	200	sf	2000
- corridors	516	sf	1000
- display space	738	sf	2500

Interpretive Center Sub-Total \$195,500

(b) Concession/Office Building (ESA Building)

Exterior

- strip paint		ls	500
- tuck point & clean brick		ls	500
- repair and paint windows	50	ea.	1600
- remove lights, signs, etc.		ls	500
- paint trim		ls	1500
- repair roof (if req.)		ls	5000
- open door on east		ls	450
- open windows on north for concession counter	5	ea.	1000
- close garage doors on west	2	ea.	1500
- remove breezeway to Exchange	250	sf	1250

(b) Concession/Office Building (cont.)

General

- remove unnecessary partitions & dropped ceilings		ls	5000
- gas hot water heat throughout		ls	30000
- new fire stair	40 steps		5000
- repair & check plumbing			1500

First Level

- paint & tackle concession	720		6500
- food concession	1176		15000
- concession office	100	1000	1000
- restrooms	450		5400
- circulation	620		1860

Second Level

- park office	725	sf	6500
- rental office	755	sf	6800
- meeting room	675	sf	6000
- storage	112	sf	500
- circulation	820	sf	3000

Third Level

- storage	2416	sf	3000
- circulation	620	sf	2000

ESA Building Sub-Total \$112,860

(c) Bike Rental (Garage)

By concessionaire

1515 @ 27 = 40000

(d) Restaurant (A to N Building)

By developer

- one level -	65000
- two levels (roof deck)	120000

Structures Sub-Total	\$308,360
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4. Site Improvements

(a) Grading, topsoil, lawn	750	cy	1125
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(b) Paving

- plaza special paving	3000	sf	36000
- walks	7000	sf	14000
- bike path	1500	sf	1500

(c) Site furnishing

- seating	8		4800
- waste receptacles	4		1200
- signage		ls	1500

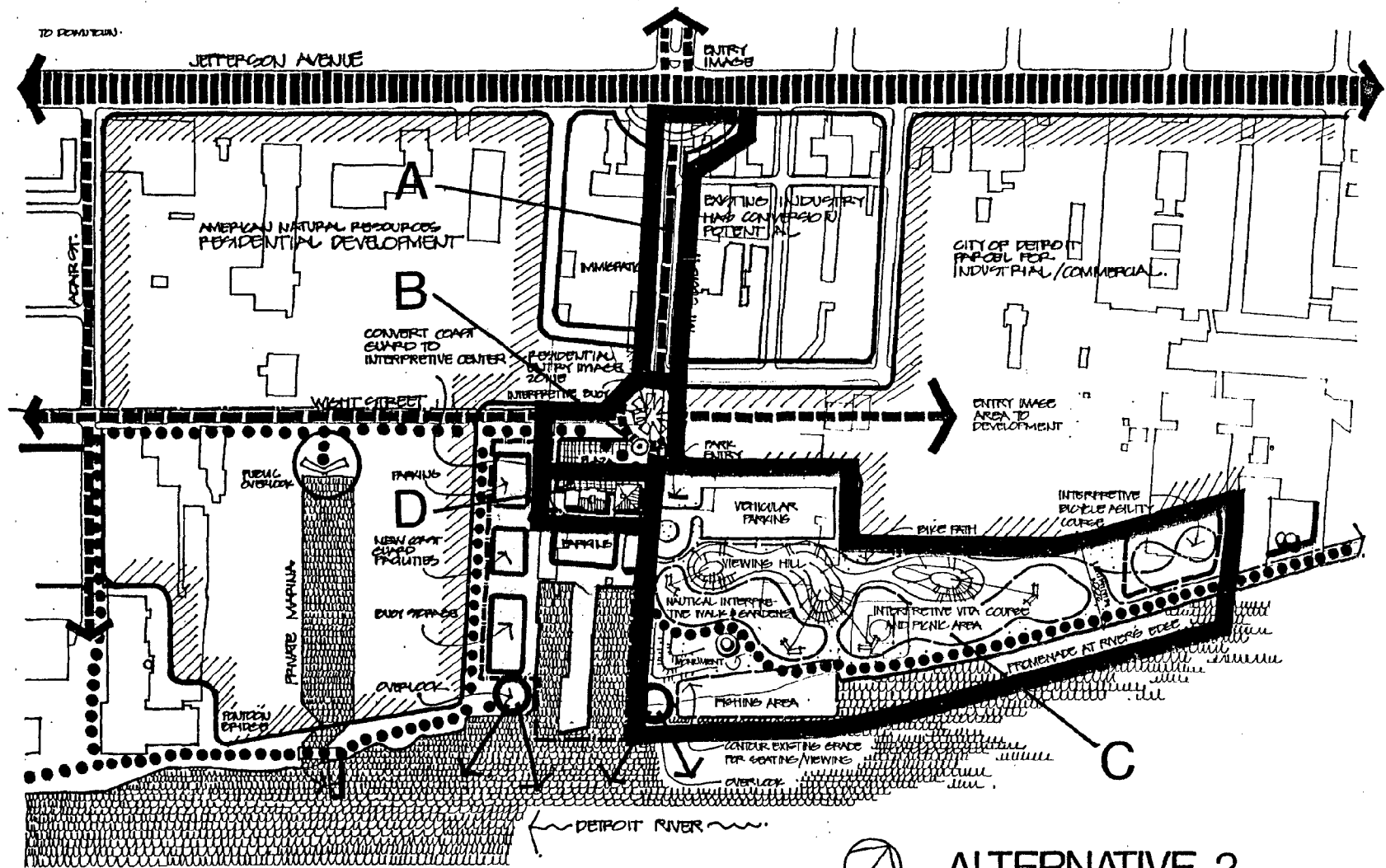
(d) Landscaping

- deciduous trees	5		2000
- ornamental trees	10		2000
- shrubs	20		1000

Site Improvements Sub-Total	\$65,125
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Alternative One Cost Estimate Summary

	Site Preparation	Site Drainage and Utilities	Structures	Site Improvements	Shoreline Stabil.	Total
A. Mt. Elliott Entry and Parking Structure	6,000	95,200	930,000	129,500	-0-	1,160,700
B. Entry Plaza and Wight Street Relocation	31,600	47,700	15,000	371,950	-0-	466,250
C. Mt. Elliott Park and Shoreline Stabilization	656,800	293,000	628,000	1,116,600	764,000	3,458,400
D. Interpretive Center and Adjacent Site	73,000	34,600	308,360	65,125	-0-	481,085
Total Construction						5,566,435
Contingency						1,133,565
Sub-Total						6,700,000
A/E Fees						670,000
Total						7,370,000



ALTERNATIVE 2

0 100 200

- A. MT. ELLIOTT ENTRY
- B. ENTRY PLAZA
- C. MT. ELLIOTT PARK
- D. INTERPRETIVE CENTER

Alternative Two Cost Estimate

A. Mt. Elliott Entry Improvements

1. Site Preparation

(a) Land acquisition

(b) Demolition of:

- walks (where needed)	5500	sf	3000
- vegetation removal		ls	2000

(c) Fill and contouring

- berm at entry at Jefferson	200	cy	1000
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Site Preparation Sub-Total \$6,000

2. Site Drainage and Utilities

(a) Drainage

- catch basins (renovation)		ls	3000
- catch basins (new)		ls	2000
- drainage piping	100	lf	4000

(b) Utilities

- <u>Electric</u>			
- bury electric & phone lines	1100	ft	55000
- street lighting (150' o.c.)	4		8000
- minipark lights at Jefferson	4		4000
- misc. lights (bollards, signage)		ls	2000
- <u>Water</u>			
- meter pit		ls	1500
- hose bibs	2		700
- piping	150	ft	6000

Site Draining & Utilities Sub-Total \$86,200

3. Structures

(a) Bus shelter at Jefferson	1		\$15,000
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4. Site Improvements

(a) Spading, topsoil, lawn area	5000	sy	7500
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(b) Concrete planter box		ls	5000
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(c) Paving			
- walks	9000	sf	27000
- bike path	5000	sf	5000
- road resurfacing (asphalt)	21000	sf	21000

(d) Site furnishings			
- entry sign at Jefferson		ls	5000
- bollards	50		30000
- benches	10		6000
- waste receptacles	10		3000
- signage		ls	1500

(e) Landscaping			
- evergreen trees	15		4500
- deciduous trees	30		12000
- ornamental trees	5		1000
- shrubs	20		1000

Site Improvements Sub-Total \$129,500

B. Entry Plaza

1. Site Preparation

(a) Demolition of:			
- fences	800	lf	1600
- walls/retaining		ls	4000
- scrub growth		ls	1500
- misc., oil tanks, debris		ls	1500
- remove paving/parking lot	55000	sf	24000
(b) Fill and contouring			
- berm at west edge	200	cy	1000
- topsoil		ls	500

Site Preparation Sub-Total \$34,100

2. Site Drainage and Utilities

(a) Drainage			
- catch basins	2		4000
- piping	300	lf	7500
(b) Utilities			
- <u>Electric</u>			
- pedestrian lighting	8		12000
- drop-off lights	4		6000
- misc. spots & signs		ls	5000
- <u>Water</u>			
- hose bibs	2		700
- piping	350	lf	7000
- drinking fountain	1		1500
- Irrigation System		ls	4000

Site Drainage & Utilities Sub-Total \$47,700

3. Structures

- bus shelter	1		\$15,000
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4. Site Improvements

(a) Grading, topsoil, lawn	300	sy	450
(b) Paving			
- plaza special paving	3000		60000
- walks	1000	sf	3000
- bike path	1500	sf	1500
(c) Site Furnishings			
- seating	8		4800
- waste receptacles	4		1200
- signage		ls	1500
- amphitheater	2500	sf	40000
- bollards	50		30000
- entry sign at Mt. Elliott Park		ls	5000
(d) Landscaping			
- deciduous trees	10		4000
- ornamental trees	5		1000
- shrubs	20		1000

Site Improvements Sub-Total \$153,450

C. Mt. Elliott Park Improvements

1. Site Preparation

(a) Demolition of:

- concrete block bldg. on west (two levels)	21000	sf	105000
- concrete block bldg. on east (two levels)	20000	sf	100000
- Re-Steel Bldg.	21000	sf	105000
- strip site of paving/gravel	200000	sf	50000
- Mt. Elliott Street south of Wight	20000	sf	8800
- fencing	1200	lf	2400
- scrub growth		ls	3000
- misc. poles, walls, bumpers, debris		ls	8000

(b) Fill and contouring

- view hill	40000	cy	160000
- contoured seating		ls	10000
- berms	1500	cy	6000
- topsoil	800	cy	800

Site Preparation Total \$559,000

2. Site Drainage and Utilities

(a) Drainage

- catch basins	4		8000
- piping	2000	lf	50000
- misc. drains (sea- wall, trench, etc)		ls	5000

(b) Utilities

- Electric			
- Lighting	4		8000
- pedestrian lights	40		60000
- misc. lighting (bollards, step, sign)		ls	10000
- Water			
- piping	2000	lf	40000
- drinking fountain	2		3000
- hose bibs			
- Irrigation System		ls	60000

Site Drainage & Utilities

Sub-Total \$244,000

3. Structures

(a) Comfort station and shelter (new structure)

1200 sf 72000

4. Site Improvements

(a) Final grading, hydroseed

45000 sy 67000

(b) Paving

- concrete walks	17000	sf	51000
- promenade	30000	sf	90000
- bike path (asphalt) (not inc. agility course)	7500	sf	7500
- drop-off circle	10000	sf	30000
- 70 car parking	21000	sf	63000

4. Site Improvements (cont.)

(c) Site furnishing

Marine Interpretive			
- Michigan relief	27500	sf	337500
- seven signs	7		7000
- course marking	1000		7500
Jogging Course			
8 Stations		ls	3200
Bicycle Agility Course		ls	7000
Nautical Monument		ls	15000
Seating	50		30000
Waste receptacles	30		9000
Signage		ls	1500
View scopes	3		600

(d) Landscaping

- evergreen trees	60		18000
- deciduous trees	80		32000
- ornamental trees	20		4000
- shrubs	100		5000

Site Improvement Total			<u>\$785,800</u>
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5. Seawall & Fishing Bulkhead

(a) Existing sheet pile

- handrail safety ladder	1100	ft	44000
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(b) New sheet pile
(curved design)

- sheet pile/tie backs/ drainage	500	ft	500000
- concrete cap	500	ft	115000
- backfill	7000	cy	35000
- handrail/safety ladder/handicapped fishing			20000

(c) Drainage structures headwall
at Mt. Elliott

ls 50000

Total Seawall & Fishing
Bulkhead

\$764,000

D. Interpretive Center (See Alt. One)

1. Site Preparation	\$ 73,000
2. Site Drainage & Utilities	\$ 34,600
3. Structures	\$308,360
4. Site Improvements	\$ 65,125

Alternative Two

	Site Preparation	Site Drainage and Utilities	Structures	Site Improvements	Shoreline Stab.	Total
A. Mt. Elliott Entry and Parking Structure	6,000	86,200	15,000	129,500	-0-	236,700
B. Entry Plaza and Wight Street Relocation	34,100	47,700	15,000	153,345	-0-	250,145
C. Mt. Elliott Park and Shoreline Stabilization	559,000	244,000	72,000	785,800	764,000	2,180,800
D. Interpretive Center and Adjacent Site	73,000	34,600	308,360	65,125	-0-	481,085
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Total Construction						3,148,730
Contingency (20%)						631,270
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Sub-Total						3,780,000
A/E Fees (10%)						378,000
						<hr/>
Total						\$4,158,000

PHASING

The overall implementation plan can be considered in three basic phases with a certain amount of activity occurring immediately at minimal cost. Cost estimates are presented for each phase.

Immediate Action

Immediate actions are intended to quickly and efficiently provide a small green space at the river's edge to promote the positive aspects and awareness of the area, and to act as a catalyst for its total development. The immediate actions include closing Mt. Elliott Street south of Wight and creating a green space on Mt. Elliott Park with a stabilized shoreline. This is possible since the land is currently city-owned. Also the area for the mini-park at Jefferson is cleared and the interpretive buoy is installed at Wight and Mt. Elliott.

Phase One

Phase One includes the improvement of Mt. Elliott Street, the Coast Guard land trade, beginning the Interpretive Center construction, and building the Mt. Elliott Park up to the edge of Uniroyal. Private developments occurring include the beginning of the American Natural Resources Development and the construction of the expanded Coast Guard facilities.

Phase Two

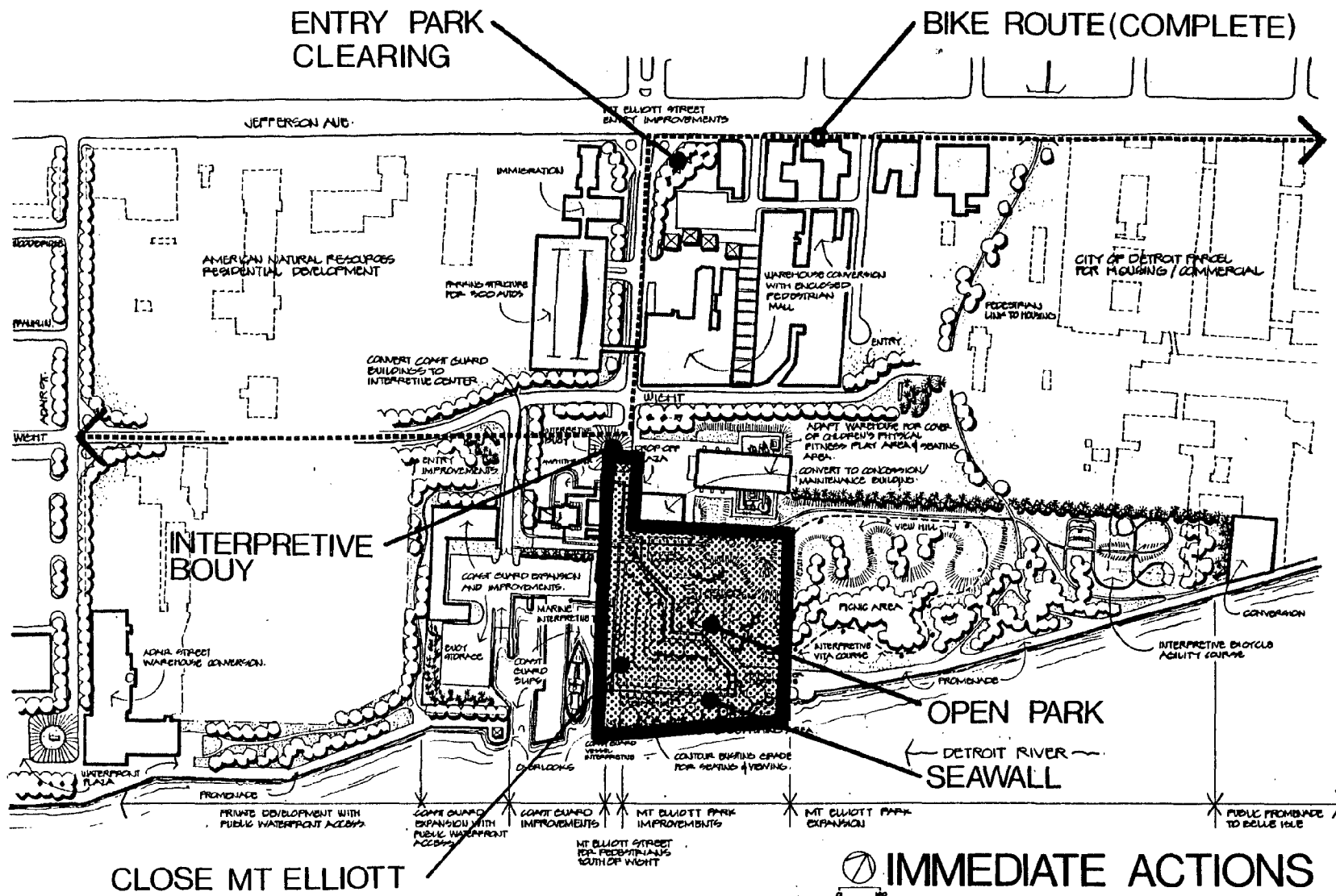
Phase Two includes the adaptive reuse of the E.S.A. Building for the Interpretive Center concession, the completion of Mt. Elliott Park, and realigning Wight with the development of the Entry Plaza in front of the Interpretive Center. Private development occurring during Phase Two includes the completion of the American Natural Resources Development, the conversion of the industrial buildings north of Wight and east of Mt. Elliott, and the beginning of the City of Detroit Development at Uniroyal.

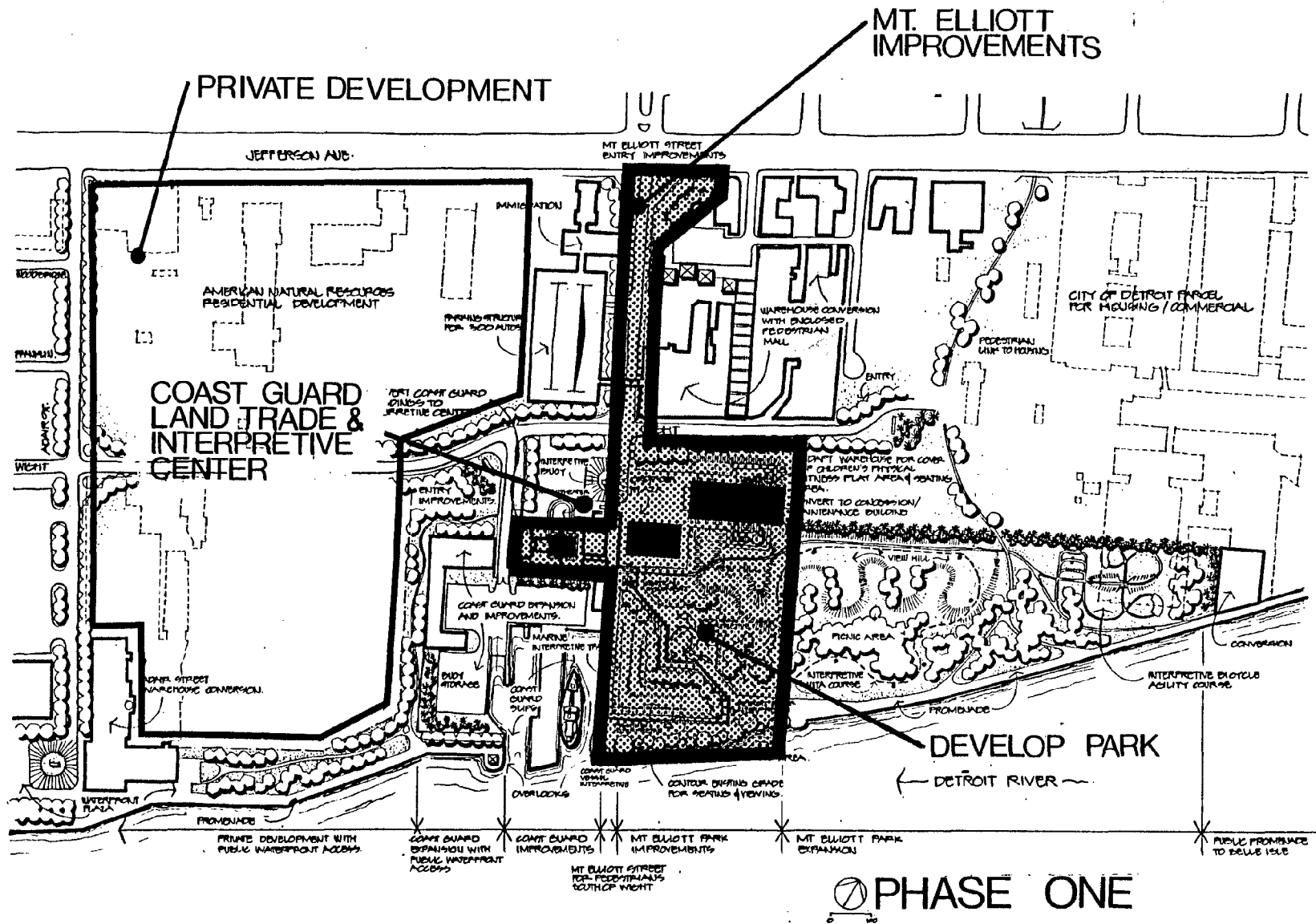
Phase Three

This Phase sees the completion of the Interpretive Center adaptive reuse and the construction of the parking structure. The development of the Uniroyal parcel by the City is also completed in this final phase.

PHASING

	Public Development	Private Development	Circulation
	Open minimal Mt. Elliott Park, shoreline stabilization		
	Interpretive Buoy		
	Bike Route Signage (complete)		
	Coast Guard Land Trade		
	Mt. Elliott Entry Park at Jefferson		
	Interpretive . Supply Building (museum)		
	Center . ESA Building (concession)		
	. Exchange and A to N Building (concession)		
	Mt. Elliott Park		
	Entry Plaza		
	Parking Structure		
	ANR Development		
	Industrial Buildings Conversion		
	City of Detroit Uniroyal Development		
	Coast Guard facilities - expansion and new		
	Temporary parking on Mt. Elliott site		
	Close Mt. Elliott south of Wight		
	Realign Wight		
	Close Meldrum and Iron		





Phasing Cost Estimate Summary

Immediate Actions

Mt. Elliott Entry Mini-Park Clearing	6,000	
Interpretive Buoy	1,000	
Close Mt. Elliott South of Wight	-0-	
Open Mt. Elliott Park Shoreline Stabilization	10,000	
	620,000	
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Sub-Total	637,000	
Contingency	129,000	
A/E Fees	76,000	
	<hr/>	
Total		842,000

Phase One

Interpretive Center (Supply Building) and Site	368,225	
Mt. Elliott Park	2,328,400	
Mt. Elliott Street Improvements and Mini-Park	224,700	
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Sub-Total	2,921,325	
Contingency	584,675	
A/E Fees	350,000	
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Total	3,856,000	3,856,000

Phase Two

Interpretive Center (ESA Building)	112,860	
Mt. Elliott Park	500,000	
Entry Plaza and Wight Street	465,250	
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Sub-Total	1,078,110	
Contingency	217,890	
A/E Fees	129,000	
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Total		1,425,000

Phase Three

Interpretive Center Concessions	By Others	
Parking Structure	930,000	
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Sub-Total	930,000	
Contingency	202,000	
A/E Fees	115,000	
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Total		1,247,000
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Total Construction		\$7,370,000
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FUNDING

The present situation makes projections for funding far more difficult than for previous studies of this nature. Assuming the continuation of present national policy for at least three more years, major funding sources such as Land and Water Conservation Fund, Coastal Zone Management, National Endowment for the Arts, Corps of Engineers and Transportation Funds may be drastically cut or completely eliminated as funding sources for this project. Thus reliance must be placed on Community Development Block Grant Funds, which currently have tremendous demands placed upon them, and incentives such as Urban Development Action Grants that may be available to private commercial development.

While cuts are continuing on the state level, transportation funding and projects costs related to adjacent private development, such as housing, might still be sponsored by the Michigan State Housing Development Authority. Additionally, regional involvement by agencies, such as the Huron Clinton Metropolitan Authority, should be investigated for participation in the park.

The major source of funds must, however, come from local sources or, as indicated above, federal sources under local options such as the Community Development Block Grant. Elements of the project which are revenue producing, such as the parking structure, could be constructed through Revenue Bonds. Non-revenue producing elements,

such as the parks, would be eligible for General Obligation Bonds, which may not be available until 1984-1985. Thus, the recommended phasing will have to remain flexible and may be delayed.

On the other hand, housing and commercial development is proposed, flanking the proposed public development east and west. The western portion (55 acres owned by American Natural Resources) is further along in study than the eastern portion (the City of Detroit owned Uniroyal parcel).

Since much of the public development directly enhances the private development (the Mt. Elliott entry at Jefferson, Mt. Elliott Street improvements, the Entry Plaza, the parking structure), it is not illogical to assume that a coordinated approach to development would include a portion of the cost of the public development as an integral part of private development costs and funding.

Without a new increase in public funds, implementation will require private investment in many of the elements of the public sector activity. If there is a future change in national policy or an improvement in local economy, public sources could supply sufficient funds to meet the projections in the recommended implementation phasing. Nevertheless, a portion of the costs of the public improvements still could and should be undertaken by the private development.

OPERATION & MAINTENANCE

The feasibility of new projected public developments cannot be fully evaluated without understanding the cost implications of operations and maintenance, since developmental costs do not completely represent the total cost of the project.

The Interpretive Center and Mt. Elliott Park are proposed to be owned and maintained by the Detroit Recreation Department, with the operations of the Interpretive Center's exhibition, conference and museum facilities to be under the control of the Dossin Great Lakes Museum on Belle Isle with the Detroit Historical Museum.

The Recreation Department would maintain the Mt. Elliott Park, the grounds of the Interpretive Center, and all maintenance and custodial duties of the buildings of the Interpretive Center. In preliminary discussions with the Recreation Department, the additional staffing required for this would be two park grounds employees and one custodial person, to maintain the converted Light-house Supply Depot and the ESA Building. The other buildings would be maintained by the private concessionaires operating them.

The operations of the Interpretive Center have been discussed with representatives of the Dossin Great Lakes and the Detroit Historical Museums. The primary cost of operating the Center includes staffing costs and display costs.

The duties of the Curator of the Dossin Great Lakes Museum are proposed to be expanded

to include the Mt. Elliott Interpretive Center. In his charge would be a Junior Historical Curator, who would supervise the daily operations of the Center. Together they would schedule and arrange displays, staff the facilities with attendant and maintenance personnel, secure funding for continued operations, schedule the conference and meeting spaces, and arrange for special exhibitions and any other required operations procedures. Two attendants would be required to maintain security and supervise displays and man the information and gift counter.

Display and exhibition costs include two basic conditions. First, initial set-up, which will require an immediate outlay for cases, display material, and signage. The majority of the historical items can be found in storage at the Dossin Great Lakes Museum and the Detroit Historical Museum, or will be gathered by private sources, such as the American Natural Resources Company, the Coast Guard, or the Bureau of Immigration and Naturalization, and so are not expected to add to the initial costs.

Other initial set-up costs will include conference and office furniture, a video-monitor security system (the multi-level nature of the building requires it), and miscellaneous furniture, fixtures and amenities.

The second set of exhibition costs will be the on-going costs of supplies, equipment, and consultants to maintain existing permanent displays, and to arrange new displays on a periodic basis. Rotating exhibits average \$700-1,000 and are presented for three-to-six month intervals.

In addition to display personnel, operating expenses would include utilities and general maintenance.

Income generated from recommended donations at the door of \$1.00 per person brings in, in actuality, 18¢ per person - based on experience at the Dossin Museum. The total estimated revenue generated from this is only \$200 per week. Based on a 50-week operating season, this brings \$10,000 per year. The experience from the gift counter at the Dossin is that it covers expenses and does not generate any appreciable income. Thus the museum/exhibition section of the Interpretive Center will require funding from outside sources, including limited City funds, corporation or foundation donations, and the like.

Costs can be reduced through increased exhibit preparation by outside sources, or through volunteer staffing of the Center, by a particular group, or groups, willing to assume this responsibility. Since no volunteer participation has been sought or offered, the operating expenses assume paid personnel are used. Also, the Center can be developed in a staged basis. By opening only the first two floors the first year and then increasing the area by one floor per year, the initial outlay can be reduced.

The operations of the other buildings will be primarily through private concessionaires and these costs are assumed to be covered in the income generated by rentals.

Projected Interpretive Center Operating Expenses Per Year (Lighthouse Depot)

A. Initial Set-Up (One-Time Cost)

20 Display cases	\$ 60,000
Display boards/signage	20,000
Conference/office furniture	10,000
Video monitor system	7,000
Audio/visual equip.	5,000
Misc. furniture/fixtures	5,000
Total	107,000

B. Personnel Requirements

Junior Historical Curator	\$ 17,000
2 attendants	31,000
Total	\$ 48,000

C. On-Going Exhibits

2-to-4 displays/year	\$ 2,500
Misc. Maintenance	3,000
Total	\$ 5,500

D. Utilities & Maintenance

Gas	\$ 6,600
Electric	9,500
Phone	1,200
Water	3,500
Maintenance/Repairs	1,000
Miscellaneous	5,000
Total	\$ 26,800

First Year Total **\$187,300**



SUMMARY

The City of Detroit has an intriguing history. Perhaps no other area of the City has as rich and intense a history as the riverfront. The area that this study covers is slated for major new developments and also contains the dramatic Coast Guard buildings and slips and massive old industrial functions. It is in this mix that the greatest potential for future development lies.

The Coast Guard buildings that are studied in this report are proposed for re-use as public structures (The Mt. Elliott Interpretive Center) to interrelate with the proposed Mt. Elliott park. This park is part of the Linked Riverfront Parks Project which will link the Central Business District with Belle Isle. The Interpretive Center and Park will work together to attract people to new development and catalyze activity.

The City of Detroit is undertaking bold moves to plan a better future and to optimize its greatest natural asset, the Detroit River. It properly planned and executed Detroit can build on its strengths and become a major tourist, recreation and entertainment center to balance its industrial/business base.

The prime location of the Mt. Elliott Interpretive Center and Park make it essential to plan in a broad and exciting manner to allow and stimulate the greatest potential of

surrounding development. New market rate housing, commercial, warehouse and factory conversions, recreation, fishing, historic and interpretive displays, entertainment and restaurants can generate a level of activity and worth unprecedented in the area's history. It is the recommendation of this study to pursue this goal, but only the dedicated work of both the public and private sectors will make it a reality.

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